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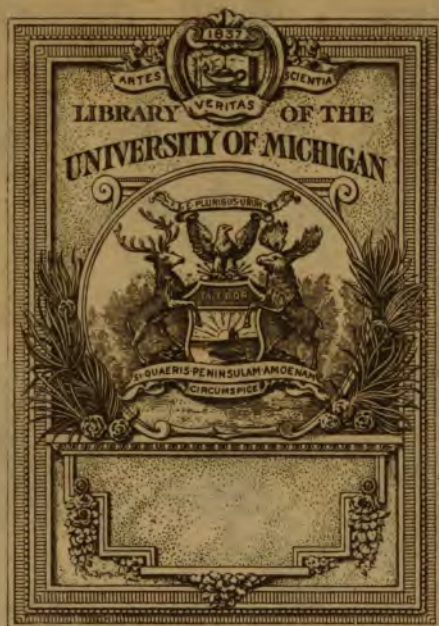
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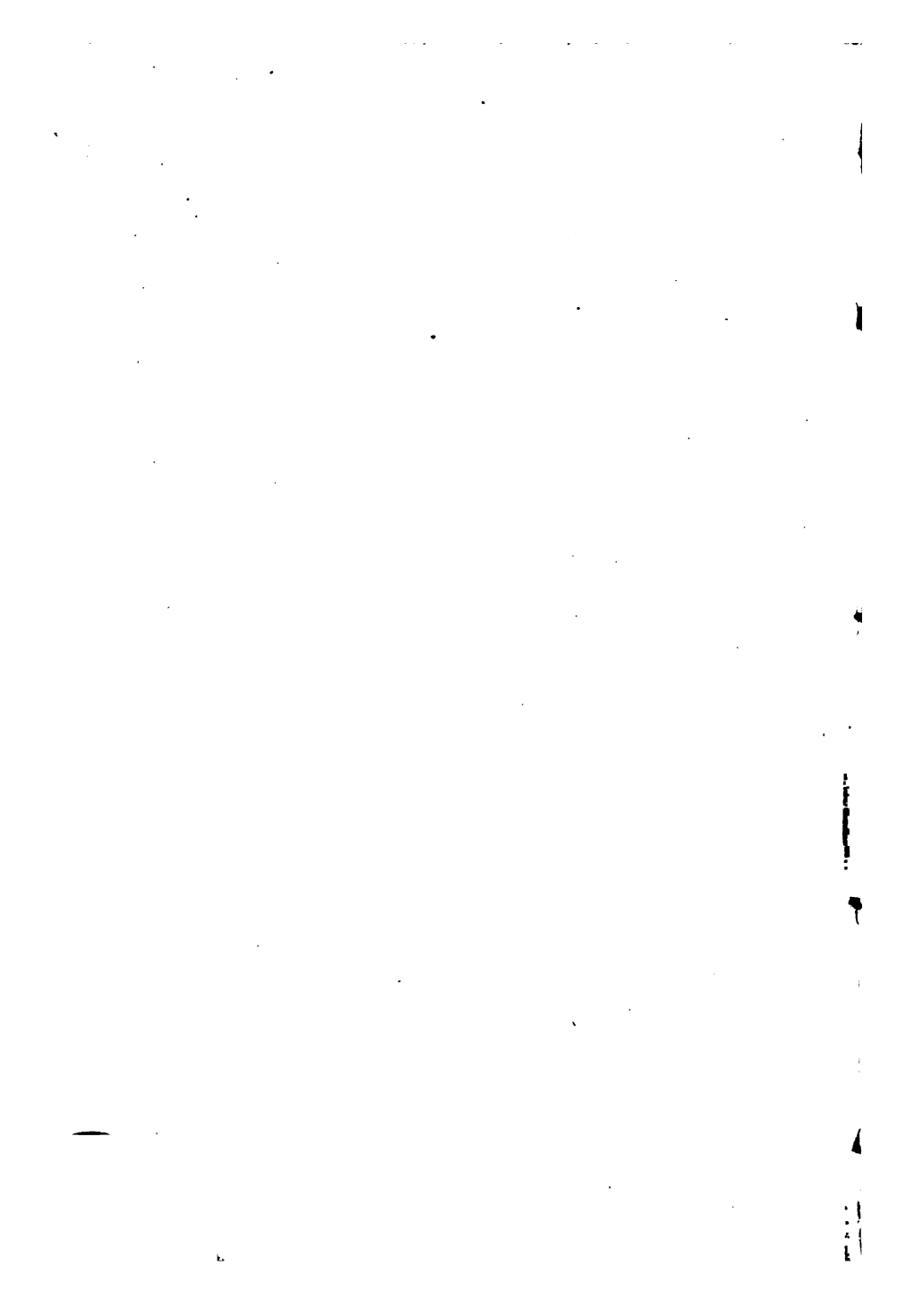
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MAP STUDIES.



Commercial Instruction.

MAP STUDIES

OF THE

MERCANTILE WORLD,

AUXILIARY TO OUR

FOREIGN AND COLONIAL TRADE,

AND ILLUSTRATIVE OF PART OF THE

SCIENCE OF COMMERCE.

BY

JOHN YEATS, LL.D., F.G.S., F.S.S., Etc.

TWELVE YEARS EXAMINER IN COMMERCIAL GEOGRAPHY AND HISTORY TO THE
SOCIETY OF ARTS, LONDON;

AUTHOR OF "THE MANUALS OF COMMERCE."

"Willst du ins Unendliche schreiten?
Geh nur im Endlichen nach allen Seiten!"

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“What a picture does modern commerce present of the boundless desires of man, and of the advancement he makes in intellect, knowledge, and power, when stimulated by desires ! Things familiar to use cease to attract our surprise and investigation ; otherwise we should be struck with the fact that the lowest and poorest peasant’s breakfast-table is supplied from countries lying in the remotest parts of the world, of which Greece and Rome, in the plenitude of their power and knowledge, were totally ignorant. But the benefits which mankind derives from commerce are not confined to the acquisition of a greater share and variety of the comforts, luxuries, or even the necessities of life. Commerce has repaid the benefits it has received from geography : it has opened new sources of industry ; of this the cotton manufactures of Britain are a signal illustration and proof ;—it has contributed to preserve the health of the human race, by the introduction of the most valuable drugs employed in medicine. It has removed ignorance and national prejudices, and tended most materially to the diffusion of political and religious knowledge. The natural philosopher knows that whatever affects, in the smallest degree, the remotest body in the universe, acts, though to us in an imperceptible manner, on every other body. So commerce acts ; but its action is not momentary ; its impulses, once begun, continue with augmented force. And it appears to us no absurd or extravagant expectation, that through its means, either directly or by enlarging the views and desires of man, the civilisation, knowledge, freedom, and happiness of Europe will ultimately be spread over the whole globe.”—*Historical Sketch of the Progress of Discovery, Navigation, and Commerce*, by WILLIAM STEVENSON, 1824.

PREFACE.

MAP-STUDIES are not uncommon. One of the literary world has appeared,¹ the object being to localise the nativity of genius or intellectual eminence, and to mark it as belonging, chronologically, to particular periods—the mythic, the classic, the mediæval, or the modern—each name being printed in characteristic type and colour on a map showing the precincts of civilisation, with *persons* instead of places; and ages or epochs, as brilliant, or the reverse.

There have been many of the industrial world. Among these a well-known one² shows the divisions of the earth in olden time as to the raw materials produced for weaving. The larger portion, tinted red, means the countries yielding sheep's-wool and goats'-hair; a second, the district north of the Mediterranean, furnishing beavers'-wool; and a third, lying south-east of a line drawn through the coast of Syria, supplying camels'-wool and camels'-hair. At the eastern corner a tinge of yellow indicates a commencement of that vast region (unknown to the ancients) the inhabitants of which clothed themselves in silk. A very small patch of green covers the

¹ *Allgemeine Geschichtstabelle auf geographischen Grunde*, vom Director Dr. Carl Vogel. Leipzig.

² *Textrinum Antiquorum*, an Inquiry into the Art of Weaving amongst the Ancients, by James Yates, M.A., &c.

countries—all low and bordering on rivers—within which flax grew and linen chiefly was manufactured. A brown shade shows the cultivation of hemp in the low country north of the Euxine, and in other places adapted for its growth. India and the Bahrein Isles are coloured blue, telling how the inhabitants have from time immemorial clothed themselves in cotton.

Our map-studies of the mercantile world not only indicate the most prominent places of production, whether of raw materials or of commodities,—with the best means of inter-communication,—but illustrate the following important principle:—*Extremes of climate or sterility of soil must limit the returns of labour, yet, not so much as mental indigence lessens the reward.* There may be parts of the earth's surface whereon human beings cannot live and thrive, whatever the exertion they put forth; still there are other parts which, seemingly ill endowed, derive from their position and inherited or acquired civilisation the possibilities of great usefulness and opulence.

The people of the inter-tropical regions, living on soils of exuberant fertility, labour less—voluntarily—than do those of other zones.

Each country is considered here, primarily, from a commercial point of view; and pains are taken to show the trade division and area to which it naturally belongs, the density and, indirectly, the condition of its population, its mineral resources, its principal products, its markets, its ports, the extent of its commerce, with our particular share, and the prospects of enlargement it affords.

Of the advantage of such auxiliary map-studies to every one possessing an atlas I have spoken freely elsewhere. Let me repeat: It is a necessary part of mercantile training, as

well as an excellent mental discipline, to try to ascertain the *relative* significance of countries. In estimating the chances of a race, *the conditions of the whole field ought to be understood*. Some of the conditions of wealth and progress may be embodied in good maps, but not the *rate* of industrial advance, or the reverse, for each country; nor can the *omission* safely be *neglected* in our struggle for commercial supremacy.

J. Y.

P.S.—Dr. Neil Arnott, speaking of a set of books for education in science, said (see Introduction to his “Elements of Physics”):—“To have all the perfections of which they are susceptible, they can be looked for only from academies of science or from an association of learned men; and even then they cannot be compiled by each individual taking a distinct part or parts, but by the parts being undertaken conjointly by several persons, so that he who conceives most happily for students may sketch,—he who is learned may amplify,—he who is correct may purge,—he who is tasteful may beautify, &c.” Fortified by such authority, let me state briefly that this unpretending little volume, like its predecessor, “The Golden Gates of Trade,” has been prepared on the above principle. The best available help has been sought for at home and abroad;—yet verbal errors may have escaped notice. Notwithstanding these, however, and a few seeming discrepancies between English and foreign statistics, it is hoped that both books may prove suggestive, and so advance the cause of neglected commercial education.



INTRODUCTION.

HERODOTUS has recorded how one Histiacus, being desirous of signifying particular intentions to Aristagoras, and finding no other way of doing so, shaved the head of a faithful servant, and imprinted thereon a message, keeping the servant at Susa until his hair had grown again. When that time was come, Histiacus despatched the servant to Miletus, without any other instructions than that upon arrival he should repair to Aristagoras and request the latter to remove his hair, and this being done, to examine the crown of his head.

The old story is worth preserving, since it shows how the *material difficulties of communication at one time almost paralysed mental action, beyond certain distances*; it serves also as a contrast to our own silent and instantaneous transmission of intelligence, *by electricity*,—ensuring international contact, if not always avoiding conflict.

This last force, in conjunction with locomotion by steam, has *altered the relative positions of business centres*, as well as *raised the quantity and quality of work done*, all over the civilised world. Lands remain the same physically, but not industrially; commercial “movement” quickens and intensifies daily; buyers and sellers are everywhere brought into more immediate intercourse. A merchant in London can “wire” to a dealer in Chicago for the price of grain at a given hour, and have a reply without greater trouble or delay than would be incurred in crossing the Thames or the Mersey. The “turnover” in commerce of any country now corresponds

closely with the extension of the telegraph, and the prolongation of the railway into Continental "thoroughfares." These last break through political barriers, and make the **NATURAL** divisions of trade more important than the *national* ones. The exigencies of industrial production and intercourse are beginning to take precedence of all others.

Ships are built bigger than ever, and the management of masses of merchandise, with increasing swiftness and despatch for both goods and passengers, is unparalleled; yet fresh facilities are being created at frequent intervals. Materials for manufacture and commodities for use are carried wherever demands occur; the necessities of life, more even than the luxuries, are included in the advantages of improved transport. Not only is there less fear of famines in India than heretofore, but trans-oceanic agriculture is stimulated and strengthened by wider and better markets; yet European farming, together with various industries, suffers from the enterprise of our own sons, now British colonists, or emigrants from other old countries. The truth of the French proverb, "*Tant vaut l'homme, tant vaut le terrain*" ("The man's worth is the land's worth"), becomes universally felt.

Food, clothing, fuel, and furniture are all being cheapened and brought within reach of the humblest, as well as tropical coffee, tea, sugar, spices, and tobacco. On our tables we place Argentine corned beef, Australian mutton, Bavarian beer, Californian honey, Cape wines, Danish or Dutch butter, French eggs, German sausages, and so on through the alphabet. These ramifications of trade involve unforeseen changes in the economic conditions of many peoples. Hence migration at home and emigration abroad have increased—the speed and security of travelling contributing to both.

The foregoing remarks are premised to give the facts greater significance. Our "**Map Studies**" relate to the earth, and also to *man*, the master "of the mercantile world." They are intended to impress on the mind of a student the structure, aspect, contour, and industrial activity of every important

commercial State in the world, each study opening with, and being based upon, the country's geographical or unalterable position.¹ The natural features, mountains, valleys, rivers, and plains follow, in order that economic inferences may be drawn as to the industrial resources and commercial activity of the inhabitants. These features depicted on any good map suggest the productive powers and opportunities of the people dwelling within the limits represented.

A few familiar examples may suffice to show what is here meant by "reading a map." We know that a harvest of grain lying so far inland that transport must be costly, cannot readily be turned to commercial advantage. We know that it is useless looking for cotton-crops in the ice regions; while furs, on the other hand, must be sought for in climes where nature protects life against extremes of cold. So we expect wool only where herbage abounds to support sheep, and we calculate that where sheep are reared there must be shepherds, with their wants. Further, in searching the world for luxuries and comforts, we find tea and coffee in one climatic zone; but wine, cider, and beer in another. Thus we may read much from a map on which are traced zones of produce, or bands of equal seasonal heat, the boundary-lines or isothermals deflecting with physical circumstances.

Let us examine more closely. Imagine a range of mountains parallel with the coast, but two or three hundred miles inland. A little geological knowledge leads us to infer the probability of finding useful minerals or metals there. The mountain range is shown to send out lateral spurs, enclosing valleys, down which the streams course, uniting in one broad river on the plain below, thence trending seawards. Climate and soil combine to promote vegetable life, and few difficulties of transport appear; while the sites of the towns are indicative of a numerous population. By a process of induction from such features (marked on the face of a map) the commercial

¹ "The United Kingdom, with the Home Industries," are more specially treated in "The Golden Gates of Trade," q. v.

student will draw **practical inferences** of the local economic resources and of the capabilities of the country.

Throughout these "Studies" economic features, rather than geographical details, have been sought out, attention being specially drawn to every characteristic of industrial or commercial activity.

The course of investigation is thus cleared to trace the **natural gravitation**, or the circulation, or the ebb and flow of merchandise; the **specialities of separate trades**; the **means of transit**; the **facilities for foreign commerce**, together with the **aptitude of the people** for international relations. The student searches for the ports and centres of distribution, distinguishing also emporiums, entrepôts, and industrial sites. In fine, he learns how the trade of the world is carried on, not haphazard, but in conformity with principle. By comparing the means of communication in different countries, and of one part of a country with another part, he may form a sound judgment also of the *tendency* of local commercial activity towards internal or to merely passive trade.

Following these inferential inquiries (which result in useful mental discipline, as well as afford practical information) attention is given to the **natural trade-area** to which each country, according to its physical conditions and economic resources, belongs; together with the **localisation of the chief mineral, vegetable, and animal productions**, as a whole, and their relation to the inland means of communication, natural or artificial.

Trade statistics are appended, serving as an index of the comparative status of commercial nations, with particular reference to the trade of the United Kingdom; that is, to the share of the total annual "turn-over" which our own country appropriates. A final review of the "**movements**" of trade and population furnishes practical lessons, of which the previous "Studies" are the groundwork. The figures are put in "round numbers," and are given simply as "guides" to the student. Two terms, each extending over five years,

are taken, at different periods, and combined, in order to equalise any exceptional circumstances, and the average of years is relied upon to show whether our trade is rising, falling, or standing still.

To make our meaning quite clear let us take an illustration. Suppose the imports from all sources in 1870 were 20 millions; in 1871, 19 millions; in 1872, 22 millions; in 1873, 21 millions; and in 1874, 25 millions. We add these together and say, "The total imports averaged, from 1870 to 1874, nearly 21½ millions annually." Of these imports "England contributed so much," meaning *an average of imports from England*, yearly, for the same period. These figures must not be read as annual amounts, but as a yearly average for five years. This mode of treatment is adopted throughout.

Again, a student in making his calculations must consider whether the fluctuations indicated are due to any extraneous cause at home or abroad, and whether, also, the movements are actual or relative. For instance, if England "turned over" with a country £100,000,000 in one period and £120,000,000 in another, there being no alteration in population or total trade during the time, the gain is actual; but if the population and total trade have each increased 25 per cent., there is no advance at all; on the contrary, a decline, for we only increased 20 per cent. against a total increment of 25 per cent. The terms "staple exports or imports" refer, unless otherwise stated, to imports and exports with the United Kingdom.

Let the student test the "course of trade" of any country by the *latest* statistics, basing his calculations on the lines we have laid down, and bearing in mind the various influences indicated above and in "Importing and Exporting" in the "Golden Gates." Is trade advancing *pro rata*? or is there an advance, but at a less rate than formerly? or is the advance no advance at all, looking at the increase of population in our own country and others, and at the rise exhibited in total trade by other nations? These are questions the student must

answer, for it is possible that a country may increase its sums total and yet not rise proportionately to a general rise.

The transactions of commerce are now so perfectly organised, and the system of intercommunication is so complete, that *the condition of any one mercantile State affects all the rest*, and one price for a commodity virtually rules the commercial world. The value of grain or cotton stuffs, for example, varies but little in widely distant markets, being brought to a level by instantaneous electrical correspondence and by cheap, safe, and speedy transport.

One word more. In "reading a map" the student must look to every detail, since there is no mark without its meaning. He should note how the country is situated—whether placed on sheltered seas or exposed to stormy oceans. Are its ports ever ice-bound? Are its shores deeply indented, or do they present a low-lying sea-frontage liable to be sand-blocked?

Let him especially trace the waterways; notice how rivers and tributaries start from elevated points, and uniting, run through plains to the sea, or, meeting obstacles, turn aside and form an impetuous and rocky torrent. Let him read from the maps alone the nature of the streams, and judge which are likely to run placidly and deep, affording easy means of transit; or, on the other hand, those that by their speed prevent any general floatage. Consider which are likely to accumulate most *débris*; which will probably deposit these accumulations in their beds or at their mouths, or which will carry the detritus out to sea; and, lastly, judge from the position of their estuaries which are most likely to attract external trade.

Notice how large towns and populous centres throng the mineral fields; how industries are placed just where they are most easily carried on; how one part of a country is given up to pasturage, another to tillage, while a third seemingly lies waste.

See, too, how large ports exist only where navigation is

unimpeded, either maintained so by nature or art, and yet how the requirements of inland places are served by small ports in every available bay or inlet.

Lastly, notice what man has done to increase areas of distribution, and to equalise the transit of goods. See how an eastern basin or area is joined with a western, and the two with a southern by canal; how town is joined to town by railroads; how the iron way follows the most natural and easy course, but, where inducement offers, how it pierces or scales the various elevations, and throws two sides of a mountain range into one area.

Study the various elevations, and knowing the vegetable growths at the sea-level, test those of any higher altitude, remembering that every 350 feet elevation means a difference of 1° Fahr. Finally, acquire a clear idea of the lines and routes of oceanic communications, and thus comprehend the ways and means of maritime industry, and how truly the uttermost ends of the earth are in our day joined together by the golden bands of commerce!

Such is the method of "reading a map" from a commercial point of view. Let us *suggest* eight comprehensive questions, covering as many "points" as possible, applicable to any commercial country, and also to almost any good map, and *suggest* answers such as a student should be able to give. We will take our nearest Continental neighbour, France, as our test-map.

Quest. 1. How is the capital of this country best reached from England?

Paris, the capital of France, is situated 246 miles from London by the shortest route. The journey is performed the most expeditiously by the mail-line *via* Dover, Calais, and Amiens, or by Folkestone and Boulogne, with alternative routes by Newhaven and Dieppe—the shortest in distance—by Southampton and Havre, and, for the west of England, by Weymouth and Cherbourg.

Perishable merchandise, as a rule, favours these routes; other

goods go by steamer from London or other out-port to one of the ports named, or to Rouen, and thence forward by rail. Paris, too, could be reached direct by light-draft steamers on the Seine.

Quest. 2. Give the industrial characteristics of the people.

Four-fifths of the area of the French soil is estimated to be under cultivation ; one-half of the population is agricultural, one-fourth industrial, *i.e.*, mining or manufacturing, and one-twelfth commercial.

The chief industrial characteristic, therefore, is that appertaining to the soil, wheat-growing, beet cultivation, vine-culture, mulberries, and minor vegetable resources being the staple industries, varying in accordance with climatic zones. The well-known French wine-brands, brandy, prunes, patés, preserved fruits, pippins, confitures, eggs, fruits, and vegetables are among the products of this industry, and find a ready market in England.

The coal and iron fields induce mineral and metal industries, with a concentration of labourers, in such centres as St. Etienne, Thiers, Cosme, Le Creuzot, &c.

The French are noted for their "taste" in colours and designs, and we see a concentration of workers and busy *textile industries*, including dyeing, figuring, printing, in centres adjacent generally to the coalfields, as Lille, St. Quentin, Amiens, Lyons, Rouen, &c.

In temperament the French are vivacious, enthusiastic, and impetuous, fond of change, but in business matters full of practical sense and shrewd judgment.

Quest. 3. What does the country yield commercially ? and what special wants prevail ?

The main items for exchange are dairy-produce, wine, brandy, silk and other textile fabrics, rye, buckwheat, sugar, fruits, with timber from the Landes.

The special wants of the country are wheat, coal, and fuel for the west and north-west districts, ironware, and machinery. Silk, wool, cotton, and colonial produce are also purchased for manufacturing requirements. The wants of France are

somewhat similar to those of England, but note any difference between the two countries.

The artistic taste of the French is the reason of the importation of yarns or stuffs to be dyed or figured and re-exported as French goods.

Quest. 4. Explain its principal inlets and outlets,—whether seaport, waterway, or railway,—and sketch the river-basins.

Dunkirk is chiefly an inlet, rising in importance, the new docks giving an incentive to more active trade; Calais, a mail port, and for general cargoes an inlet only; Boulogne, a Channel, passenger, and transit port, is a small inlet and outlet, the latter almost exclusively for cement, sent east; Dieppe, a trans-Channel port, an inlet only, for general goods; Havre, an extensive “in-and-out” port; Rouen, an inlet only. Honfleur, Caen, Hennebont, St. Nazaire, La Rochelle, and Rochefort are practically inlets only, chiefly for fuel.

Nantes and St. Nazaire are outlets for *special* goods solely; Bordeaux, an important “in-and-out” port; Bayonne, “in and out”—mainly coals and fuel in, wood out; Cette, “in and out”—latter chiefly wine; Marseilles, a very extensive inlet and outlet; Hyères, out only—salt.

N.B.—A student carefully examining the map of France should be able to say *why* some of these ports are inlets only, some outlets, and others “in and out.”

The Canal du Rhin et Rhône gives an inlet and outlet between France and Germany, as also does the Canal Marne.

The Canal du Nord unites France and Belgium; the inter-linking canals of Calais, Ardres, St. Omer, St. Quentin, de la Somme, &c., also.

The chief rail inlets and outlets are the various lines joining the French towns of Lille, Valenciennes, &c., to the Belgian towns of Courtrai, Tournai, &c.; the great international lines between Paris and Brussels, Paris and Cologne, Paris and Darmstadt; Paris and Strasbourg; Paris and Bâle; Paris and Neufchatel, Paris and Geneva, Paris and Turin; Marseilles to Genoa, Bordeaux to Madrid, and Marseilles to Barcelona.

The-river basins, the navigable extent of the rivers, the floatage, and the inter-connections are clearly indicated in "Recent and Existing Commerce," Part ii, p. 361 *et seq.*

Quest. 5. Name the chief sites of its various industries, and also of its distributing centres.

Note.—The wine centres, grain centres, coalfields, ironfields, marble districts, porcelain centres, textile and specialty centres are fully given in the present work, combined with "Recent and Existing Commerce."

Distributing centres are, in the first instance, the seaports; inland, among others, we find Paris, Lyons, Amiens, Lille, Mezières, Laon, Rheims, Chalons, Dijon, Macon, Nevers, Orleans, Tours, Limoges, &c.

In any country a distributing centre is created wherever railway lines cross or diverge, and thus feed opposite ends of the land, *at confluents of rivers or branches, at canal junctions, or at caravan meeting-points.*

Note.—Thus, a thorough knowledge of the internal means of communication will generally enable a student to point to all centres in a country, great or small.

Quest. 6. Show its internal communications by stream, canal, rail, or track.

See, for answer, "Recent and Existing Commerce," pp. 227, 269, 356 *et seq.*, and pages following in the present work.

Quest. 7. What effects have physical features upon the commerce of a country?

Many every way, *for by physical features are determined the natural gravitation of merchandise, and very largely the character of the people.*

In a newly opened country the transit of goods to the coast must perforce be by valley, by stream, by track, or by caravan; in fact, by whatever means nature herself dictates by reason of the natural features and resources.

Let us make our answer clear, by taking two examples, the countries of Spain and Holland.

In Spain and Portugal mountain ranges run generally east

and west, uniting north to south at their eastern end, they exhibit a high elevation, and in the range of the Pyrenees debar intercourse with France.

These chains, in former days, restricted each enclosed valley to itself. There are five parallel ranges, between which important rivers run westwards to the sea. These rivers, on account of their courses, are difficult of navigation, without labour being constantly bestowed—think out the reason for this;—the mountains, too, are lofty and rugged, and the difficulties must be great in transporting goods from north to south, or *vice versâ*. The only way to mix with the outer world is by descending the valleys to the sea. Therefore the first effects on interchange can be traced from an atlas. This effect is, that *unless the inhabitants are enterprising enough to overcome nature's obstacles, their intercourse must be confined to their own valley, and trade will be as limited as the area.*

Again, a population hemmed in by natural barriers loses that intercourse with the world which is necessary to progress; ideas settle in one groove, and very soon, compared with others, the people belong to a past century, enterprise becomes dwarfed, and they wait for the intervention of strangers, instead of acting for themselves.

Holland has no barrier to universal intercourse; on the contrary, the map shows us a flat surface with artificial "dunes" or sandhills by the sea-shore, by which we infer that the land lies low and has to be protected from inundations. From these physical conditions we assume that the geological formation will be of the most recent; that mineral resources will be *nil*; that the rivers which cross the country will be sluggish and inclined to silt up; and that beyond these rivers irrigation will be difficult, as there are no elevations, and consequently no gravitation or fall.

Our first conclusion would be, that commercial transactions would be very small, and that Holland would be only a "passage" country. But we see the face of the map dotted

all over with towns and centres; hence we modify our judgment, and infer that the inhabitants, brought, by internal waterways and by the ocean, into communication with the people of other lands, *have become enterprising, and have built up for themselves by steady industry a commerce to be envied by many a nation more advantageously placed.*

These are indications of the knowledge to be gained by the study of a good map, conclusions which can be tested by the history or the commercial activity of the country under consideration.

Quest. 8. How has man assisted or overcome physical features, and what has been the effect upon commerce?

Enterprising nations have devised means of shortening transit between places lying comparatively close to each other, but separated by a physical barrier. Canals are cut joining one branch of a river to another, or to a stream running in another direction; the iron road is introduced linking town to town, city to city, and each and all to the seaports and the business sites,—those sites indicated by nature as likely to yield a profitable return for labour expended.

Mountain ranges are pierced and tunnelled, spurs are surmounted by gradients, and bridges and viaducts are built connecting places formerly almost unapproachable. Thus one area is merged into another, and one part of a continent supplies to an adjacent area its requirements without hindrance. The gain to commerce is immense, for it makes one field and one market of a whole continent; nay, by the introduction of steamships, of the whole world. Thus Mont Cenis tunnel joins Italy to France in a few minutes; the St. Gothard tunnel unites Northern Europe with the southern shores, by a passage of about nine miles beneath the Alps; canals unite the three seas of France with the interior and with each other; a waterway connects North Europe with South and South-East Europe, by joining the northward-flowing rivers to the south and eastward flowing streams by canals, crossing spurs of intervening heights; and the "greyhounds"

of the Atlantic join the New World to the Old in the short space of a week.

Mercantile business is no longer of a haphazard nature, but as much as any of the professions it demands varied and very laborious brain-work. Intelligence has rendered the old style of "merchant adventurers" a misnomer. Our youths preparing to enter the office or the counting-house, as our future merchants, bankers, and leaders of trade, bent upon upholding our commercial supremacy, have a right to receive from their elders, whom they regard as exemplars, not only the knowledge stored up by practical experience, but that specific course of teaching and training which has never been denied to the members of the "learned" professions.

Before quitting the subject let us look more closely at the business-range and requirements of London. London is the centre of the world's exchange; every country is there represented by its own banker, as Russia by the Russian Bank, France by the Credit Lyonnais, &c.; while, on the other hand, we do not find branches of the Bank of England in St. Petersburg, Paris, or Berlin. Again, nearly all remittances are made "on London," even though the transaction is outside that city. When Glasgow sends a cargo of coal to the West Indies, payment is made by a "bill on London;" a return cargo is shipped, and the worth, or adjusted difference, is settled by a "draft on London." All London bankers, whether home or foreign branches, keep their balances at the Bank of England; hence *the Bank of England stands as the banker of the world.*

London, again, by virtue of being the exchange or banking market of the world, must be the most sensitive pulse of commercial transactions. A cargo of coal is wanted, say, in Cronstadt or in Hong-Kong, it matters not where. A telegraphic message is despatched to London, where the colliery proprietors have their agencies; this inquiry is passed on to the field of produce; immediately a reply is wired back to London that a cargo of the required coal can be delivered at

a certain dock or port at a given time; a visit then by the inquirer for the cargo to the coal exchange tests the wants of the markets, or, in other words, brings in competition; for the inquiry is not confined to one part of the world or to one merchant. A price is thus arranged, and transmitted for acceptance to the original inquirer. If accepted, a vessel has to be found to take the cargo; the inquiry is flashed from the London shipbrokers to every corner of the United Kingdom; a charter-party, the bases of which are or have been settled in London, and universally acknowledged, is now entered into, providing for the carriage of the goods and the payment of the freight; an insurance policy through London is effected, and thus our Metropolis sets the springs of industrial life in motion, in almost every international phase.

With the intellectual rivalry that has sprung up in recent years the nations around us, and especially the Americans, have, quite within their rights, untiringly tried to outstrip London, and to supplant her as the centre of commercial enterprise. Possession, however, is a great point in our favour; yet *our only right to the pre-eminence is that of the greatest competency.* To keep pre-eminent, our work and workers must continue to be the best. For them to continue the best, they must advance;—to stand still is relatively to go back,—because Germany, France, the Low Countries, and even the small state of Denmark, are endowing their youthful communities with the principles of industrial and commercial science.

The same spirit of enterprise which has placed us in the van of commercial nations will not yield, for want of effort, in the competition of the world. Towards such a purpose the author of this manual offers a contribution of commercial facts and principles which, within convenient compass, furnishes information bearing upon and applicable to the business of industrial, commercial, and social life.

QUESTIONS APPLICABLE TO ALL COUNTRIES.

1. How is the capital of this country best reached by us ?

This refers not only to established mail-routes, but to competing lines for passengers or goods, and should include some particulars of fares, freights for various merchandise, customs-dues, &c.

2. Give the industrial characteristics of the people.

This necessitates consideration of natural resources, distribution of raw materials, direction of employments towards agriculture or mining, and aptitude shown for manufacturing or maritime pursuits.

3. What does the country yield commercially, and what wants prevail ?

Note the exports and imports relatively to each other as well as to general trade ; consider the climate, the race, the government, and the people, as active, passive, progressive, or otherwise.

4. Explain its principal inlets and outlets by ports, rivers, and railways.

This includes the whole coast-line and land frontiers, internal and international means of communication by land or water, with trade-areas allied.

5. Name some of its chief sites of industry and its distributing centres.

This demands topographical knowledge of materials, manufactures, and markets for the sale of goods ; of the connections and ramifications of local traffic.

6. Show its internal communications by stream, canal, road, or railway.

This aims at all transit-facilities, seasonal or otherwise, the thoroughfares, feeders, and junctions, with all important points of connection between one town and another.

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MAP STUDIES.

EUROPE.

NORWAY.

Geographical position of Norway, 1, 5—Geographical features, 1, 2, 5—Characteristics of Norwegian trade, 3, 9, 10—Climate, as affected by the Gulf Stream, 2, and in relation to industrial life, 4, 10—Surface view, mountain, river, lake, coast, 1, 5—Commercial activity as governed by nature and art, 6, 6a, 6b, 6c—Ebb and flow to natural centres, with circulation of goods, 7—Centres of distribution, 6a, 6b, 8, 12—Mineral resources, 11, 15—Agricultural products, 6c, 16—Manufacturing industry, 6c, 12—Fishing, 6b, 8, 13, 17—Natural division of trade, 14—Means of intercommunication, 6, 18—Trade statistics, 19—Review of the movements of trade and population from 1872 to 1881, 20—Examination questions on the Scandinavian Peninsula, see p. 21.

1. Norway has a sea-board of great extent in comparison with the superficial area of the kingdom, and is in direct course, westwards, across the Atlantic, for Great Britain and America,—southwards, commanding the Skager-Rack and the entrance-waters of the Baltic, and separated by a few miles only from Central Europe.

2. "Fiords" (*Scottice*, firths or forths) or arms of the sea run great distances inland between lofty cliffs. The ameliorating influences of the Gulf Stream are sufficiently felt, even to the high latitude of North Cape, to keep the coast open through the winter; while the Dofrines, on their eastern inland slope, arrest the frigid polar winds.

3. The position of Norway is against extensive commercial

interchange. Trade is confined to the native earth-gifts in return for foreign manufactured goods.

4. Precluded from many productive industries by short winter days and long winter months, the people are drawn towards agriculture, fishing, and fowling.

5. The mountains which run from the North Cape to the Skager-Rack are the *natural* as well as the *political* boundaries between Norway and Sweden. These mountains, placed not far inland, send out spurs to the sea-coast, and meeting the landward fiords, preserve to the country a rugged and precipitous aspect, more as elevated plateaux than hill and dale. *These features prevent the existence of rivers of any size, excepting in the south, where the Glommen, running north to south, different in direction from most of the other rivers, by its lakes and stream, gives communication from Drontheim on the west coast to Frederikshald on the Skager-Rack and the great Romsdal valley connecting Romsdal with Christiania and Frederikshald.*

6. The Norwegian has utilised the first valley, and following the stream, has constructed a railway, which gives additional communication between Christiania and the coast at Drontheim; from the latter place, tracing the Storsdal river, he has gained the mountains, and surmounting them, has, by means of the Storsjon valley, or rather by the plateau of Nordland and Drontheim, achieved rail international communication between Drontheim in Norway and Ostersistad in Sweden, and thence Gefle, Fahlun, and Stockholm.

a. From the physical conditions of the country, the people attach themselves to the coasts, along which all the centres lie; the inland towns being few, until we reach the lower latitudes, where the railway has promoted trade.

b. The country north of Drontheim consists mainly of *fishing villages*, where the inhabitants, ranging the coasts both north and south, find a remunerative exchange by sending into the markets of the world much fish and marine products, with birds, feathers, down, and fur.

c. Further south some *industrial activity* obtains in **mining**, and a little **textile work**. The *chief operations* are, however, those **appertaining to the soil**, in the cultivation of potatoes and cereals, from which a spirituous liquor is distilled; some orchard fruit, &c.; the tending of flocks and herds of diminutive cattle on the pastures; and in an especial degree, that **industry which belongs to the forests**, covering so much of the surface, such as saw-mills, the making of essential oils, and the various products of the woods.

7. As can be clearly seen, the **natural gravitation** of merchandise *is by the railway, the valleys, and coastwise by sea*; with *timber floatage on the streams* to the nearest lake, fiord, or coast.

8. **Ohristiania** is the **great distributing centre**, and being in communication with Drontheim, and also with Sweden, south of the mountains, is able to supply a large area. *Other smaller centres* are **Drammen** for the Kongsberg industries; **Porsgrund** for Skien and neighbourhood; **Frederikshald** for the Glommen valley and East Sweden; **Stavanger**, **Christiansand**, and **Arendal** for the province of Christiansand; **Bergen** for the surrounding coast and province; **Romsdal** for Christiansand and the valley; **Drontheim** for Central Norway; **Tromsøe** and **Hammerfest** are important *fishing centres*, the latter acting as an entrepôt between North Russia and the Norwegian coast.

9. Norway must thus be classed both as a **supplier and a customer of England**, sending over her raw materials in exchange for finished goods, for which she is an excellent market.

10. The high latitude and elevated nature of the country necessarily retard agricultural activity, besides the fact that the rocks of Norway are of primitive origin, and consequently yield a poor soil. Hence *the produce of the country does not suffice for its own support*, and some of the necessities of life have to be imported.

11. **Mineral resources** are fairly abundant. Norway is evidently analogous to Sweden in this respect; and where transit is available, *mining is carried on*. As the means of communication extend, so apparently does this industry.

12. Manufactures exist *mainly for home consumption.*

13. All the ports named above, of which Bergen is the chief, are centres of the **fishing industry**, which constitutes, with the forests, the main wealth of Norway for commercial interchange.

14. Norway belongs chiefly to its own special trade designation—although some of the lower ports on the Skager-Rack are commercially included in the **Baltic trade**—and is classed in the *zone of northern grains.*

15. Resources from the mineral kingdom are more worked than formerly. We find rich mines of cobalt at Modum; copper at Roros, Drontheim, and Bergen; iron—magnetic—around the Gulf of Christiania and in Drontheim; argenteriferous lead at Kongsberg; silver at Kongsberg, Nordland (Vefsen), Svenning dal and Hetteren Island.

Beyond these are worked alum, aspatite, chrome ore, felspar, gold, honestones, marble, nickel, sulphur pyrites, salt, and zinc. Buskerud district is the richest in cobalt, iron, nickel, and silver; Bradsberg and Nedenaes for cobalt, iron, and nickel; Stavanger, South Bergenhuus, and Drontheim for sulphur pyrites and copper.

16. Agriculture is very restricted. Norway produces a little barley, which is the chief cereal; also some flax, hemp, oats, potatoes, rye, and sainfoin; fruit-trees, hops, tobacco, and wheat in the south, with forest products. Lichens grow on the highest levels, pine-trees lower, oaks and beech lower still, and grass on the lowest levels.

Barley ripens at 70°, hops disappear above 62°, hemp and rye above 66°, oats above 65°, wheat and fruit-trees above 64°, and tobacco above 60° 30'.

Forest products, besides wood and timber in all their commercial varieties, consist of charcoal, potash, pitch, resin, tar, and turpentine. **Cattle-rearing** is an extensive industry on the pastures.

17. Fishing, carried on vigorously along the whole coast, is a staple occupation, and consists of *cod, herring, mackerel,*

salmon, lobster, seal, &c., while in the extreme north a large trade in *furs, skins, feathers*, and *eider down* exists.

18. **Local trade movements** are chiefly by water, the many fiords giving ample communication with inland districts and the sea. Further, the extension of the railway from Drontheim to Sweden, over the mountains *viâ* Ostersund, Gefle, and Stockholm, and again south from Drontheim to Christiania, Stockholm, and South Gothland, gives an expeditious international thoroughfare, connecting by ferry-packet with the main Danish line, and thus all Europe.

19. **Trade Statistics.**—In 1872 the *population* was estimated at about one million and three-quarters, equal to about fifteen to the square mile.¹ Taking the period from 1870 to 1875, we find that *the total imports* averaged about seven millions sterling yearly, and the *exports* five millions and a half. Of these, *the imports from Great Britain* averaged some million and a half, and *the exports to the United Kingdom* two millions and a half sterling; or about 20 per cent. and 45 per cent. respectively.

The *staple export* to us at this time was wood and timber, valued in 1874 at a little over two millions sterling; while the *staple imports* were cotton goods (about a quarter of a million), coals (the same), and woollens (about £170,000).

By 1881 the *population* had increased to nearly two millions, but without perceptibly altering the density per square mile. In the next period, from 1881 to 1885, the *total annual imports* had risen to an average of about eight and three-quarter millions, and *the exports* to nearly six and a half millions sterling. Of these, the share that Great Britain held was nearly three millions of the exports, and one million four hundred thousand pounds of the imports.

The *staple export* was here again wood and timber, valued at one million and a quarter; *the imports* were, as at the last period, cotton goods (£180,000), coal (a quarter of a million),

¹ For explanation of statistical reading, see Introduction, p. xlii.

woollens (£150,000), with iron added, at a valuation of some one hundred and sixty thousand pounds sterling. We learn that in 1885 Germany contributed to the imports slightly in excess of this country; but with regard to exports, Great Britain took considerably more than any other country.

20. Thus, looking at the trade history of Norway for the fifteen years from 1870 to 1885, we are able to draw the following conclusions:—that **the population** *increased* only about one-eleventh from 1872 to 1881; that **the total imports** rose just over 25 per cent., and **exports** nearly 20 per cent.; that of this trade **England** in 1870 to 1874 held nearly 20 per cent. of the imports and 45 per cent. of the exports. *To preserve the same ratio in the next period of 1881 to 1885, the figures should have been one and three-quarter millions and three and a half millions sterling respectively; they really were some £1,380,000 and £2,875,000, showing a slight fall.*

Although the staple export of wood declined 50 per cent., there is every indication of a steady trade with Norway. There is certainly no reason why we should lose our *pro-rata* turn-over; all the towns are situated on the fiords, which run so far inland that there is but little difficulty in collecting and distributing merchandise.

SWEDEN.

Geographical position, 1, 2—**Geographical features**, 2, 5, 6, 8—The climate of Sweden contrasted with that of Norway, 3, 4—**Surface view**, 6, 8—**Commercial activity**, 9-9b—**Divisions of labour**; industries in accordance with physical features, 9, 9b—*Gravitation of goods to natural centres*, 10—**International communications**, 11, 11a, and reasonings thereon—**Centres of distribution**, 12-12b—**Industrial labour**, 7, 9b, 13, 14—*Characteristics of Swedish trade*, 14—**Description of Stockholm**, 15. **Norrköping**, 16. **Gothenburg**, 17. **Carlsrona**, 18. **Helsingborg**, 19—**Natural divisions of trade**, 20—**Mineral resources**, 21—**Localisation of the principal metals and minerals**, 22—**Agricultural produce**, 23—**Localisation of the chief agricultural products**, 24—**Fisheries**, 25—**Means of intercommunication**, 9a, 11, 11a, 26—**Trade statistics**, 27—**Review of the movements of trade and population from 1874 to 1885**, 28—**Examination questions** on the Scandinavian peninsula, see p. 21.

1. Sweden is situated on the eastern side of the northern peninsula, called Scandinavia, and is bounded on the east and south by the shallow tideless Baltic and its entrances.

2. A range of lofty mountains divides it here from the sister kingdom of Norway. Sweden is in direct communication with Russia, Germany, and Denmark, having also a sea-way to England, Western Europe, and the Americas. Observe, however, that alone among the kingdoms of Europe, Sweden possesses only one sea-way of approach, so that vessels seeking Swedish ports must return by the route they came. This commercial drawback *limits the international trade to Western Europe and the near-lying countries*, the distance to the East and the difficulties of transit by land being so great that little active commerce is transacted direct.

3. Sweden is situated in the same latitude as Norway, only on the east of the central hills or mountains, which are here

removed a greater distance from the shore than on the Norwegian side. Instead of descending to the sea in plateaux of high elevation, as in Norway, the mountains here sink into plains, and are generally covered with alluvial deposits brought down by the rivers.

4. The difference in the climate of Sweden from that of Norway is considerable. Debarred by the mountains from the beneficent effects of the Gulf Stream, and being open to the cold blasts that sweep the flat lands of Northern Russia, the country is laid under the icy hand of winter for a considerable period of the year, and the frozen Baltic Sea becomes a "high-way" between the Swedish and Russian coasts.

5. We notice also that the streams, which on the western side of the mountains rush precipitously to the fiords, here, on the plains, *become real rivers*, and thus gravitating arteries for the country through which they run; and as between the extreme north and Gefle there are many of these rivers, each with tributaries, no part of this northern country can be very far removed from natural means of transit.

6. As in Norway, the country is thickly covered with forests; while farther south, from the boundaries of Sweden proper, where the rocks give signs of great mineral wealth, especially of iron, which is here highly magnetic and very abundant, mining industries flourish.

7. Textile manufactures are prosecuted in a few places, but *chiefly for home consumption*.

8. The soil and climate of Gothland are well adapted to the growth of oats and flax of superior quality, and agricultural activity here holds sway.

9. Man will always fix his attention on those earth-gifts which lie nearest to him and which promise him a remunerative return for his labour; hence we should expect to find Gothland largely *agricultural*, with a scattered population and few centres; Sweden proper covered with towns of *mining industry* and a concentrated population; and the north with but few towns, and the *centres of distribution on the coast*.

a. Further, as a falling stream will always give floatage sufficient for wood, we should not expect to find any or many modern means of transit in the north; but south, every available means is certain to be taken hold of to expedite transit for the town and country harvests.

b. This is really what we do find, with the single exception of the famous **Gellivara mining circle** of the far north, which is now in direct international communication with Russia by the only European railway extending to and entering the Arctic circle, and *the international line* running by Fahlun and Ostersund to Drontheim—the Norwegian port—which *marks the division between the purely forest industries of the north and the mining work of the centre.*

10. **The natural gravitation**, then, of the northern territory to the seaports is by *the rivers*; of the centre, by *the rivers and canals*, assisted by the *railway*; and of the plains in the south, by *the lakes* and their connecting *waterways*, also assisted by *the rail.*

11. Although Sweden enjoys international communication, it is altogether different from that of other Continental countries. The Russo-Swedish line of the north does not as yet extend farther than Gellivara, and is not, therefore, of much service for *general* distribution; in fact, its use is clearly only to encourage this particular iron industry.

a. The Norwegian-Swedish connects the Atlantic, the Baltic and Cattegat, but its economic use is more for transporting internal produce than for real international trade—the *reason being* that at the southern terminus in Sweden *a few miles of sea across the Sound occasions a breaking of bulk.* Therefore the chief external movements of Sweden are similar to those of a sea-girt land, and carried on principally by the sea itself, except in the case of perishable articles, which use the railway lines and their steam-packets for the sake of speedy distribution.

12. Looking, then, at the distributing centres; from Haparanda in the extreme north to Gefle, we find a succession of

ports, each the centre for the area covered by the river on which it stands. *a.* Farther south, **Stockholm** is the great distributing centre of all Sweden; while inland, **Fahlun**, **Upsala**, **Dannemora**, and **Orebro** are central points of minor circles, towards which special merchandise gravitates and finds a further easy distribution by lake, canal, and rail.

b. **Linköping**, **Norrköping**, **Calmar**, **Carlsrona**, and **Malmö** are important gravitating centres for Gothland; while **Helsingborg**, being the transit-station for Danish and European goods, is an extensive emporium. **Gothenburg**, too, commanding the southern entrance to the Gotha Canal, embraces in its area a large district extending to the lakes and confines of Norway, and vies with Stockholm as an emporium.

13. The want of fuel has much impeded Sweden in industrial activity. Wood is used chiefly, but however beneficial this may be for the making of steel, it does not enable textile and other industries to be carried on with profit.

14. The cheap transit of to-day, by which coal is so readily imported, enables the railways to be supplied, and assists in supporting a few textile centres on or near the coasts, notably around **Norrköping** and **Stockholm**. Sweden is a market for finished goods and manufactures generally, giving in return wood and all raw products of the forest, the fields, and the fisheries, with the iron and steel of the mining districts.

15. **Stockholm**, the "Venice of the North," besides being the political capital, is an industrial and commercial city of importance. It is one of the centres of the "Baltic trade," and possesses a commodious and safe harbour, but the approaches to the port are dangerous. It is an important centre of interchange, sending out its products of wood, tar, pitch, potash, &c., with iron; and receiving tissues, colonial produce, wines, oils, silk for its own factories, coal, and the usual requirements of town populations. It is in regular communication with England by Hull and London, with Russia by the Gulf of Finland ports, with Germany by the

Baltic ports and Hamburg, with Denmark by Copenhagen, with France by Dunkirk and Havre, and generally by the "seeking vessels" of the mercantile marine.

16. **Norrköping** is situated at the embouchure of the Motala, and is a cloth manufacturing town of some importance. It exports the iron and woods of Dalecarlie and Sundermanie, and receives chemicals and general English goods, besides raw materials for its manufactures. This port is connected over-sea with English, German, and Swedish ports.

17. **Göteborg** is the great centre of commerce in South Sweden. Placed at the entrance of the Gotha Canal, and on the Cattegat, near the embouchure of the river Gotha, *its port is one of the safest in the Baltic area*, and increases its commercial importance as the terminus of the Stockholm railway, being also in communication by water or rail with all Sweden, and, internationally, with Norway.

18. **Carlskrona** is the military port of this area, and possesses shipbuilding yards and docks. **Malmö**, situated on the Sound, is a trans-Channel port between Sweden and Denmark, and disputes with Gefle, by reason of its position and transit business, the rank of the fourth port in Sweden.

19. **Helsingborg** lies opposite Elsinore, and is the ordinary crossing-point between Sweden and Denmark; it owes much of its importance as a maritime and commercial city to its transit-trade.

20. Sweden belongs exclusively to the "Baltic trade," and is divided into three areas—south, the *grain area*; central, the *mining*; and north, the *forest area*—which last represents nearly one-half the area of the total surface. The area of Sweden is 170,979 square miles, about 74 per cent. being cultivated. Sweden belongs principally to the *region of hardy grains*.

21. The **mineral products** are very considerable—iron in a special degree, peculiarly adapted for the manufacture of steel. The mineral resources consist in the main of alum, bismuth,

bergmahl, coal, copper, cobalt, chrome, gold, iron, lead, manganese, marble, and fine granite, nickel, porphyry, peat, silver, slates, salt, stones, sulphur, saltpetre, tin, and zinc.

22. Coal is very poor, and only mined at Hoganas, near the north-east entrance to the Sound.

Cobalt at Tonsberg and Orebro.

Copper at Fahlun, Atvidaberg, Carlberg, &c.

Iron, the greatest mineral wealth of the country, is universally worked in the central area, and in the mountains more northerly, the principal mines being at Gellivara, Dannemora, Persberg, Risberg, Taberg, &c.

Lead chiefly round Sala.

Marbles and porphyry at Elfdalen.

Zinc at Ammaberg.

Owing to difficulties of transit, the other minerals are not much worked.

23. In the southern area we find among agricultural produce barley, beans, buckwheat, colza, flax, hemp, hops, madder, oats,—the chief cereal,—potatoes, peas, rye, tobacco, vegetables, and wheat; while in the northern areas the forests yield wood and timber, deals, planks, battens, boards, charcoal, potash, pitch, resin, tar, terebene, turpentine, &c.; and in the extreme north we find lichens and moss.

24. Barley is cultivated in Scania, Upland, and West Norland.

Flax, of excellent quality, is an important article of export, cultivated in the southern area of Sweden.

Forests cover a large portion of the surface, and range from beech and firs in the south to oak and fir in the centre, and pines, fir, and birch in the north. From 64° N. is the true forest land, which constitutes practically the entire wealth of Northern Sweden.

Oats are the staple grain, and much grown in Smaland and West Norland.

Rye is a good cereal growth in Scania, Calmar, and East Gothland.

Wheat is not prolific, but grows somewhat sparingly in the south.

Potatoes are cultivated as a universal crop.

25. Fishing is a great industry in the Baltic Sea, and comprises herrings, trout, salmon, &c.

26. Local Trade Movements.—Sweden, for so mountainous a country, has come well to the fore in international transit; it connects both in the south and north central areas with the important towns of Norway, and recently the most northern railway in Europe has been opened, running from Russia and Finland through Lulea to within a few miles of the famous iron mountain of Gellivara.

For the further facility in the conveyance of goods are the main and branch railway lines from the industrial centres to the chief seaports, the canals and lakes uniting opposite seas, and the rivers running from the mountains to the sea, so extensively used for wood floatage.

27. Turning to statistics, we find that in 1874 the population numbered about 4,340,000, equal to twenty-six to the square mile of area; about three-fourths being engaged in agricultural pursuits.

The *total annual imports* into Sweden from 1870 to 1873 averaged some eleven millions sterling, and the *exports* reached this amount within eight hundred thousand pounds. *Great Britain held a fair share of this trade*, sending into Sweden about two million pounds worth of goods, and receiving seven millions worth in return. Of this merchandise, cotton goods (valued at half a million), iron (seven-eighths of a million), and coal (half a million) were the staples imported from us; and wood (£4,300,000), oats (£2,000,000), bar iron (just under a million), and pig iron (a quarter of a million) were the chief exports.

Comparing 1885 with the above, we find the population had increased about three hundred and forty thousand, with a greater tendency towards industrial activity.

From 1881 to 1884 the *total imports* had risen to seventeen

and a half and the exports to thirteen and a third millions. Of these, Great Britain contributed to the imports two millions and a quarter—a slight monetary rise—and received of the exports just over eight millions. The staples remained, inwards, cotton goods (a quarter of a million), iron (£300,000), and coals (half a million); outwards, wood (just over three millions), oats (one million and a quarter), iron (a little over one million), butter (£730,000), and animals (a quarter of a million). It is stated that nearly half the area of Sweden is forest, and that half the cultivated land is under cereals—chiefly oats.

28. We are thus able to draw conclusions as to the course and history of Swedish trade during these fifteen years. The population increased only about eight per cent.; the total imports rose nearly 60 per cent., the exports about one-third. Of this trade we held during the first period one-fifth of the imports and 70 per cent. of the exports. *To maintain the same proportion in the following period, we should have supplied imports to the value of three millions and a half, and have received quite nine millions and a quarter from Sweden; but the real figures were two millions and a quarter, and a little over eight millions, showing that, although the amounts were larger, they had not increased pro rata with the general rise; in fact, they show a relative loss of about 33 per cent. and 11 per cent. respectively.* Particularising, each staple of export showed a decline, while in imports there was no active life. In the latter period we held only about 12 per cent. (one-ninth) instead of one-fifth of the imports, and 62 per cent. instead of 70 per cent. of the exports.

THE SUM OF THE WHOLE TRADE MOVEMENT DURING THESE FIFTEEN YEARS SHOWS THAT SWEDISH TOTAL TRADE INCREASED ABOUT 60 PER CENT. ON IMPORTS AND 33 PER CENT. ON EXPORTS, BUT ENGLAND, INSTEAD OF SHARING PROPORTIONATELY IN THE RISE, EXHIBITS A LOSS OF 8 PER CENT. ON BOTH IMPORTS AND EXPORTS.

Our purchases from Canada of deals and timber, with some

flax, have influenced this trade adversely ; but there are no indications of any considerable relapse, although we traded with Sweden in a declining ratio compared with other countries. On the other hand, of the "carrying trade" we do a considerable portion, notably for Belgium, France, and Spain ; so that the freights earned are due to England as imports, either in money or money's value, in return cargoes.

DENMARK.

Geographical position, 1, 4—**Geographical features**, 1, 2, 2-4—The effect of the position of Denmark on the inhabitants, 3—The effect of the industry of the people on the land, 4—**Commercial activity**, 3, 5, 7, 8, 9, 10—*Ebb and flow to natural centres*, with circulation of goods, 5, 12—The equilibrium of commercial movements adjusted by the railways, 5—England's interest in Danish trade, 6; contrasted with that of Germany, 6—**Industrial activity**, 7, 9, 10; *Characteristics of Danish trade*, 8—Distribution of "workers," 9, 10—Centres of distribution, 11—**Natural division of trade**, 13—**Mineral resources**, 14—**Agricultural products**, 15—Localisation of the principal agricultural produce, 16—**Fisheries**, 17—Means of intercommunication, 5, 11, 18, 22—**Trade statistics**, 19—Review of the movements of trade and population from 1870 to 1880, 20—The tendency of Denmark's trade with England, 21—**Examination questions** on the Scandinavian peninsula, see p. 21.

1. **Denmark** is a peninsula of low-lying land, running northwards from the mainland, in a contrary direction generally to the peninsulas of the great land-mass of the globe. It is really a part of the great European plain, and its shores are washed by the North Sea and the entrance-waters of the Baltic. **The coasts are sandy and flat, and do not offer any facilities for harbours on the west coast, while those on the east are only used by small vessels.**

2. **The islands attached to Denmark are of more consequence; they are the storehouses of this nation, and contain the best land.** Ritter says: "The Danish peninsula without the adjacent islands of Funen and Zealand would be but a mere tongue of sand."

3. **The absence of minerals and the poor soil of the peninsula leave the Danes the choice between a seafaring life and improving the productive power of their land.** Manufactures,

except such as conjoined to husbandry, are very unimportant, as every kind of machinery required must be imported.

4. The climate is tempered by the nearness to the sea. The people, turning their attention to agriculture, have converted their apparently useless soil into pastures covered with sheep and cattle. Favoured by the marine vapours, there is a constant moisture in the atmosphere, giving to the vegetation an emerald greenness. By judicious attention to dairy-produce and the introduction of scientific methods of working, Denmark has reached an excellence in this direction of husbandry unexcelled by any other nation.

5. *Deprived of good harbours, equilibrium is maintained by railway lines* which connect Denmark with Germany. The sheep and cattle gravitate to **Tonning**, on the west coast, the nearest point for western distribution, and are shipped direct to the Thames; while perishable dairy-produce comes by the international railway lines.

6. England has an active interest in the trade to Denmark, by the fact that the great centre of Copenhagen absorbs much coal, for the use of steamers, of which the greater number are English, entering or leaving the Baltic. The Firth of Forth and the Tyne give a direct and quick passage to Copenhagen at a cheap rate; hence these centres of English industry are able to supply coal as against the German fields, where the fuel would be carried by rail and then shipped, involving a double labour—or else be taken by a circuitous journey down the Rhine and round the coast.

7. *Some little iron and textile work* is done in Copenhagen, but mercantile requirements, such as ship-repairing and so on, have mainly brought about this ironworking, and being close to the Swedish fields of supply and within easy reach of those of England, there is little difficulty in obtaining material.

8. The course of trade in Denmark is supplying raw produce, almost entirely of food-substances, which she exchanges for manufactures. She draws from her own West India Islands

colonial produce, which does not, however, generally come direct, but through Hamburg or the emporiums of Holland.

9. With a population almost entirely *agricultural or seafaring*, the people are, of course, scattered; the fruitful lands of Zealand attracting the greatest, and the barren parts of West and North Jutland the scantiest number.

10. *The produce of the soil allows for the supply of the people and leaves a margin for export*; but manufacturing industry fails to supply their wants, and this kind of labour is dear and unremunerative.

11. Copenhagen is the great centre, entrepôt, and emporium of Danish trade. Except for perishable goods, merchandise is chiefly carried by sea to this port, and distributed thence by the railway lines. Central towns, such as Roerskild, Sero, Maribo, Odense, Aalborg, Randers, Viborg, Holstebro, Skanderborg, Kolding, and Ribe, a border town, have sprung up on these lines, and act as receptacles for the surrounding districts; so that the "set" of commercial movements is naturally to the seaport of Copenhagen in the first place, then to the smaller ports for special small cargoes, and to the German frontier for European or general distribution.

12. Neither Denmark, Holland, nor Belgium presents natural features of gravitation, the land throughout being an almost dead level. The ebb and flow of merchandise are therefore *free, or governed solely by destination*. Each country has, however, its one great central emporium or distributing centre—namely, Copenhagen, Rotterdam, and Antwerp.

13. Denmark forms commercially a portion of the "Baltic trade," but comparatively little business is done *direct*, if we except the coal shipments to Copenhagen. *The country belongs to the beer and butter regions of the temperate zone.*

14. Minerals are of little economic value, consisting principally of peat, though there is a little poor coal in the island of Bornholm. Clays, chalk, marl, peat, fuller's earth, salt, and amber are practically the only products from this kingdom of nature.

15. **Agriculture** consists for the most part of pasturage for sheep and cattle. Oats are the chief cereal; but barley, beans, buckwheat, colza, flax, hemp, hops, hay, madder, peas, potatoes, rye, tobacco, and tares are also cultivated, with apples and other fruit.

16. **Laaland** yields the best Danish wheat; **Funen**, the best fruits, beans, hops, and buckwheat; while **Fredericia** circle gives tobacco.

Barley grows well in Zealand, part of Jutland, Samsøe, and in Bornholm—specially good for malting purposes.

Oats of the finest quality are produced in Jutland.

Forests are of small extent, and lie principally on the east side, in Funen and Zealand.

The cereal yield has been said to be the largest of any corresponding European population, excepting Mecklenburg.

17. **Fisheries** are important on all coasts, and comprise herring, oyster, lobster, seal, turbot, &c.

18. **Local trade movements** are entirely sea-borne, except on the south, where railway transit with Germany introduces international communication; and by a short sea-passage this connection is extended to Gothland, in South Sweden.

19. Looking at the movements of trade and population, we find that in 1870 the people numbered just over one million and three-quarters, being equivalent to 123 to the square mile, and of these somewhat about two-fifths were employed in agricultural pursuits.

From 1870 to 1874 the *total imports* averaged a money value of six and a half millions per annum, and *exports*, four and three-quarter millions sterling. During these years Danish trade increased steadily; the weight of the exports rising, on the average, 25,000 and the imports 70,000 tons per annum.

Of this trade **Great Britain** assisted in the imports to the extent of two millions and a quarter, and received of the **exports** some three millions and a quarter. The **staple imports** were coals (just over £500,000), iron (£500,000), and cotton

goods (nearly half a million); the chief exports were butter (about $1\frac{1}{2}$ millions), barley (£750,000), wheat and wheat-flour (£320,000), oats (£230,000), and live animals (over half a million).

Turning to the next period, from 1880 to 1884, we see that the population had increased two hundred thousand, raising the density to one hundred and forty-three to the square mile, with the same proportion as to division of labour,—one-fourth being industrial.

The rise in total trade was very great, the imports having increased to a money value of fourteen millions and a quarter, and the exports to ten millions and a half, on the average of these five years. The imports, or requirements, were, in their order of importance, textile manufactures, iron and steel, timber and attendant manufactures, coal, wheat, sugar, coffee, and rye; the exports, or surplus, being butter, swine, cattle, cereals, and flour, hams and bacon, horses and hides,—an instructive list.

But what was England's share at this time? Calculating the average, we find that we contributed to the imports just over two millions a year, and received of the exports five millions and a quarter sterling; that the goods we sent to Denmark were in the main cotton goods and yarn (£370,000), coal (just under half a million), iron (£200,000), woollens (£230,000), and sugar (just under £200,000); while we received butter (valued at over two millions), corn and flour (£360,000,—twice this sum in the single year 1883), and live animals (over one million and a quarter). It is said that over three-fourths of the area of Denmark are now productive.

20. We are thus able to draw conclusions from this trade history, that the population *increased* about one-tenth, the total imports *rose* about 125 per cent., while the exports *increased* one and a quarter times,—an abnormal rise. In the direct trade with England our sales *decreased* slightly, but our purchases from Denmark *increased* nearly two-thirds. The rise in the exports is chiefly noticeable in butter, which in the

latter period about doubled, and in live animals, whose value rose 125 per cent., but cereals *declined* three-fourths. On the other hand, our supply of coals to Denmark *declined* over one-tenth in value, cotton manufactures one-fourth, and iron three-fifths.

During the first period *we held, in round numbers, nearly three-fourths of the exports and one-third of the imports. To preserve the same ratio in the second term, the exports should have been valued at seven and three-quarter millions, and the imports just over four and three-quarter millions; but in reality they only reached five and a quarter millions and a little over two millions respectively, or about half the exports instead of three-quarters, and 14 per cent. imports, instead of one-third.* We lost considerable ground, the figures being really below those of the first period, although the population had increased and the total commerce had so largely extended; therefore it would seem that Denmark had less need of our manufactures, or else the Danes bought more from other countries, or manufactured for themselves.

21. The tendency of this trade is for us to buy more of Denmark,—chiefly of cattle and dairy-produce,—but for us to be unable to sell to her our own goods in any increasing quantity.

22. The facilities for agricultural industry in all its phases, the fine seaboard, and the direct connection with European thoroughfares have enabled Denmark, of late, to rise to no unenviable position among commercial States. In the eighth century, says Playfair, the Danes burnt London, Paris, and Cologne.

Examination Questions on the foregoing Countries of the Scandinavian Peninsula—Norway, Sweden, and Denmark.

1. Contrast the two kingdoms of Norway and Sweden in their physical features, in so far as those features bear upon the commercial advantages or disadvantages of the two countries respectively.

2. The Danish peninsula is a mere tongue of sand, unproductive of economic minerals or crops ; yet the Danes are a prosperous race. Account for their commercial advancement.
3. What are the salient industries of Norway, of Sweden, and of Denmark respectively ? Describe the working of these industries, and say upon what natural resources they are founded.
4. Name the chief commercial ports of these three States, and show how the character and area of their trade are influenced by their geographical position.
5. As these regions are unsuited for manufactures on any large scale, explain how the people of each State supply their wants of clothing and of the arts of life.
6. Give statistics to prove the material progress and present condition of these States, especially in relation to British commercial intercourse.

GERMANY.

Geographical position, 1—Geographical features, 1, 3a, 3b, 3c, 12, 13, 16
 —Natural divisions of the country, 2, 28—*Geographical position* of the first division, 3—*Geographical features* of same, 3a, 3b—River-courses in general relation to navigation, 4—Ritter on the rivers of Germany, 5—Ports, 6—Artificial aids, canals, 7; railways, 7, 7a, 25; crossings or junctions, 7b—Effects of these upon areas of distribution, 7b, 7c—Comparison between the first region and England in respect to resources and industries, 8; fishing, 8a; agriculture and attendant trades, 8b—Central markets, 9, 14—Sites of industries, mining, 3b, 10, 15, 17, 20; agriculture, 3b, 8b, 14, 15, 17, 20a; textile and manufacturing, 11, 13, 15, 17, 20, 20a—*Geographical position* of the second division, 12; contrast with the first, 12—The natural "set" of goods in relation to trade, 13—Centres of distribution, 7b, 14—Industries as governed by nature, 15—Description of the third division, 16—The economic resources of Germany in relation to her external trade, 19, 21, 22—**Commercial activity, 17, 23a**—German international land trade, 18, 21, 23—Centres of receipt and distribution, 23a, 23b, 23c—*Ebb and flow of goods to natural centres*, with circulation of merchandise, 24—Comparison as to trade movements between England and Germany, 26—**Natural division of trade, 27—Mineral resources, 29**—Localisation of the principal metals and minerals, 30—**Agricultural resources, 31**—Localisation of the chief agricultural produce, 32—Means of intercommunication, 20, 25, 33—**Trade statistics, 34**—Review of the movements of trade and population from 1871 to 1885, 35—**Examination questions, p. 36.**

1. **Germany** lies in the very heart of Europe, and is surrounded by the most enterprising nations. **She is most conveniently situated for commerce**, having on the north a coast-line of about one thousand miles, divided between the Baltic and North Seas, and being in touch with the granaries of Europe on the south-east and east, with the olive regions of the Adriatic on the south, and with the industrial sites and ports of Western nationalities.

2. Her natural position embraces **three distinct districts**; **first**, the region from the sea to the range of mountains which extends from east to west through the country some three hundred miles inland; **secondly**, the region beyond these mountains to the confines of the Empire; and **thirdly**, the western side, a lateral division, which embraces the valley of the Rhine.

3. **The first district** includes a portion of the vast Central plain, which is continued to the very foot of the Ural Mountains; on the north it embraces Denmark; while on the west it extends to and covers Holland and Belgium.

a. The Central European mountains, with their offshoots, the **Harz**, the **Thuringer**, and **Westerwald**, are *by nature the seats of industries*; for it is among these upheavals that **mineral resources** are found. Besides this, they are the birthplaces of many streams,—important adjuncts to the prosecution of manufactures.

b. Between the mountains and the sea we find a **level plain**, sandy and stony, but with occasional patches of good alluvial soil. Such formations show us at a glance the nature of the industries that are to be expected: *in the plains agriculture* will be the leading feature, and *on the hills mining* and attendant industries.

c. **Germany**, in the first region, is specially favoured with **rivers**, which in every case, except that of the Elbe, rise in the mountains already referred to, and traverse the plain in a north-westerly direction, finding exits in the Baltic and North Seas, *thus occasioning the bulk of German sea-borne-commerce to pass our English shores*.

4. **Rivers**, gently sloping to the sea, are adapted for navigation, but against this is the fact that the *débris* brought down in the first rush of their upper courses from the mountains is deposited in the bed of the rivers, in their middle and lower courses, the force of the stream not being sufficient to carry the deposits out to the sea; hence the beds of the rivers are shallow and constantly rising. The tide necessarily flows a long way inshore, and brings with it the sea-sand, while the

downward stream brings the disintegrated mountain rubble. There is consequently a tendency during the melting of the winter snows for the waters to overflow their banks; and when this catastrophe occurs, such a layer of sand is deposited over the surrounding country as to make it for years unfit for profitable cultivation.

5. Ritter has given a beautiful description of German rivers. He says: "Less marked in their characteristics than the Rhine are the Elbe and the Weser. These both rise, not among the Alps, but among the mountains of Central Europe. They lack, therefore, the exceedingly romantic character, but not the picturesque scenery, of Alpine rivers; and this they owe to the obstacles over which they pass. . . . The **Elbe** has broken its way from the Bohemian ridge through the so-called Saxon-Switzerland, as far as **Meissen**, and the **Weser** from the fissures of the **Werra** and **Fulda** to the **Porta Westphalica**. The Elbe and the Weser make with the Rhine the triad of European rivers which have broken a pathway for themselves through mountains which impeded their course. . . . Another class of rivers are those which encounter no obstacles, and flow in a placid stream from the source to the mouth. They extend from the **Vistula** to the **Ems**, including the **Oder**, but excluding the **Weser** and the **Elbe**."

This description suggests the laws of the gravitation of merchandise.

6. Each of these rivers has an important port at its mouth. The **Vistula**, rising among the Carpathian Mountains and flowing first easterly and then northerly, embraces corn-bearing Poland, then again entering German territory, finds an outlet at the important seaport of **Dantzic**. The **Oder**, rising close to the source of the Vistula, takes a more direct course to the sea, and comes out at **Stettin** with its auxiliary port of **Swinemunde**. The **Elbe**, rising among the far mountains of Bohemia, gives the only *natural* communication with the southern side of the central hill-range, and finds an outlet at **Hamburg**, the most important port of Germany. The

Weser, rising near Fulda, flows nearly due north to Bremen and Bremerhaven. And lastly, the Ems, rising near Detmold, flows to Emden, and may almost be called the frontier river between North Holland and North-West Germany.

7. Man has assisted these natural waterways by deepening the channels and joining river-basin to river-basin by canals, thus largely increasing the areas of distribution. Further, the low and level lands have occasioned *no difficulties in the laying down of railways*, and now the iron road connects all the industrial sites and centres, besides giving communication internationally.

a. Further, man's ingenuity has broken down natural barriers, piercing the mountains by tunnels or scaling by gradients. Thus Northern Germany now communicates with Central Germany, Switzerland, and the Adriatic Sea by railway, adding very much to the commercial position of the Empire.

b. Again, at the junctions and crossings of the railways important towns have risen, such as Osnabruck, Munster, Hanover, Berlin, Kottbus, Frankfurt, Wurzburg, Posen, Breslau, &c., which, besides any local industry for which they may be noted, have now superadded the business of *internal distributing centres*.

c. In old times the natural gravitation of merchandise was from the hills to the sea by the rivers. *It is still the same, but augmented by the railways*; yet the ebb and flow are not now restricted between the seaports and industrial circles, for by *gravitating to the nearest inland distributing centre*, goods can as easily be sent north and south as east or west. What a gain to commercial movements! No longer restricted to the Baltic and North Seas, Germany is able to add her merchandise to the "Mediterranean" and "Black Sea" trades, and can distribute to the far East by the southern lines quite as readily as any European country.

8. The resources of this district of Germany are similar to those of England; hence we find analogous industries.

a. **Fishing** occupies the population of the coast; thence to the lower mountain slopes, cereals, hops, fibres, beetroot, and tobacco are found, and attendant **agricultural products** result.

b. The barley, hops, and potatoes support many **brewery** and **distillery** establishments; the **forests** yield their woods and minor products; the carefully tended flocks on the green pastures give the unrivalled **Berlin wool**, and the bones, hides, skins, &c., of **Thorn, Posen**, and the neighbourhood; while the rich grain-bearing fields of Poland and Prussia yield that large white and thin-skinned wheat so prized in English markets under the style of **Dantzic wheat**; and the fields of beet give "**beetroot sugar**," which is so largely supplementing, if not supplanting, the product of the sugar-cane.

9. These industries have occasioned **central markets**, which thus become in the first instance distributing centres, such as **Berlin, Breslau, Posen, Stettin, Bautzen, Dresden, Leipzig, Weimar, and Kirchheim** for wool.

10. On the coal and mineral fields which extend from the west to the east we find **mining** and the accompanying industries, coupled, as in England, with **textile manufactures**.

11. For these there are *three distinct circles*; first, the **Dusseldorf** circle, which includes the mighty ironworks of **Essen** and the textile centres of **Elberfeld** and **Barmen**; secondly, a central circle, covering the mining districts of the **Erz-Gebirge** and the textile centres of **Chemnitz** and **Bautzen**; and a third circle around the **Riesen-Gebirge**, with the centres of **Breslau** and the **Upper Oder valley**.

12. Turning to the **second district** or region,—that beyond the mountains to the frontiers,—we find *a different state of industrial life altogether*. The inhabitants of the plains of **Bavaria** and **Wurtemberg**, shut out by the natural barrier of the mountains from the north, seem to have limited their industrial occupations exactly in proportion as their country is shut in and restricted by the hills.

13. The natural "*set*" of goods is not towards the busy nations of the West, but by the river **Danube**, which has its course

in an opposite direction to the rivers of Northern Europe, the tide carrying the goods away from the centres instead of to them.

The Maine, a tributary of the Rhine, flows through Upper Bavaria; but this river does not appear to have induced manufacturing industries; neither have the railways nor the canals which join the northern rivers to the Danube drawn the population away to any great extent from their pastoral and agricultural occupations on these plateaux.

14. **Ulm, Ratisbon, Nuremberg, Wurzburg, Augsburg, Munich, and Passau** are central distributing towns for the agricultural produce, which, gravitating to these centres, is then further distributed either by the natural Danube artery or internationally by rail. The hops and cereals of these plateaux and the wood from the Bavarian forests yield the attendant industries so long coupled with this district, namely, the brewing of Bavarian beer and the toymaking, &c., of Nuremberg.

15. **Industries naturally follow nature's lines**; for example, the people of the **Palatinate**, the Rhine borders, and the **Moselle**, where grapes thrive, give their attention to the tilling of vineyards and the making of wine. The plateau and woods of **Bavaria** seem suitable for *saw-mills, breweries, and distilleries*; while the **northern districts** attract the *miner and manufacturer*, and the **pastures** lead to the *tending of flocks and herds*, and the consequent interchange of wool, flesh, hides, skins, bones, and tallow.

16. **The western or third district** is an important one, as it includes all the Rhine valley, that most important European artery, and its tributaries; by these latter it draws the riches of France and the products of Central and Northern Germany, and by its main stream connects Switzerland directly with the sea at Rotterdam, and consequently the whole area, and the districts influenced by the Rhine, with Belgium and Holland.

17. **This third district**, covering the busy industrial fields of **Dusseldorf**, the romantic *wine-producing regions* of the **Moselle** and **Coblenz**, the *mining districts* of **Saarbruck**, the centres of **Frankfurt-on-Maine, Darmstadt, Mannheim, Stras-**

burg, and the **Black Forest**, the industrial circle of **Mulhausen**, and being the connecting-link between **Switzerland**, **France**, **Belgium**, and **Holland** with **Germany**, may rightly be termed the transit district of this whole area.

18. *Western international communication must cross this line somewhere*, and the railways and canals now give such facilities that the political boundary is well-nigh merged into one natural area.

19. **Looking at the economic resources of Germany**, and judging therefrom the necessity for foreign trade, we find that for her **textile fabrics** she grows flax and hemp in her own borders, and for any deficiency is within easy reach of the flax-fields of **Courland** and **Livonia**.

For cotton, silk, or jute she is, like **England**, entirely dependent upon other countries. For wool she has the produce of her own pastures, and for any requirement beyond, she draws upon the emporiums of **Hamburg**, **Antwerp**, or **London**.

Of wood **Germany** not only has a large supply, but is in close communication with the forests of **Russia** or **Sweden**; while of minerals, metals, and fuel she has no lack. In fact, she resembles **England** in nearly all these points.

20. To review; the high lands of the **Rhine**, **Westerwald**, **Taunus**, **Harz**, **Thuringerwald**, **Erz-Gebirge**, and **Riesen-Gebirge** are the great seats of *mining* and *manufacturing industries*; **Westphalia** and the **Rhenish Provinces** have an unparalleled means of conveyance by the river **Rhine**; whilst the **Elbe** and **Oder** run to the fields around the **Erz** and **Riesen Gebirge**. All the country round these districts is, in consequence, covered with large towns and cities, with a great concentration of people drawn thither by the necessarily prevailing industries; an exact reproduction of **English** industrial scenes.

a. These works are entirely confined to the northern slopes of the hills, a different occupation animating the people of the south, on the **Bavarian** plain, where industrial life is closely associated with agriculture, taking shape in the

brewing of beer and working-up of innumerable little articles in wood, or, as in Switzerland, by watchmaking; while the women engage in flax-weaving, embroidery or lace, by hand; and a few places have certain specialties, as Augsburg, which claims to manufacture the finest brass-wire in Europe.

21. Turning to food-products, the *wheat-harvest is not as a rule sufficient to supply the wants of the people and the distilleries*; consequently Germany has to purchase, and this chiefly from Russia and Austro-Hungary, lying close at hand.

22. Wheat is not so largely consumed in Germany as in France or England, rye, barley, and brown bread being the chief farinaceous food,—an additional point in a German's favour as regards "cost of living," a smaller income sufficing to supply his wants.

23. Germany is able by her land frontiers to carry on interchange with other nations; this is denied to us in Great Britain. Does she want silk? France and Italy lie close to her; while for cereals, finished goods, or agricultural products she has on her borders neighbours quite ready to interchange.

a. Germany draws most of her raw material—whether industrial or food-stuffs—by the Baltic and North Sea ports.

Cotton comes chiefly to Bremen, which is then a distributing centre for the Elberfeld circle near at hand, while the Saxony and Silesian sites draw their supplies from the ports of Hamburg and Stettin.

b. The wools of Spain, Russia, Austria, La Plata, and Australia come viâ Hamburg and Breslau, or in transit from Austro-Hungary and England; raw silk, by the Rhine, Hamburg, or the southern international lines; while Dantzic, Rostock, and Lubeck are the ports most favoured by food-products coming from Russia.

c. On the other hand, manufactured German goods gravitate to Hamburg, or taking the Rhine, descend to Rotterdam or Antwerp, or to Trieste or the Adriatic for further southern or eastern distribution.

24. We thus learn from the map that *naturally* the agricultural produce of North and Eastern Europe *gravitates to those ports in the Baltic which lie nearest the fields of production*, while the raw materials of far-distant lands, with the manufactured goods of Germany, which naturally flow westward to reach the ocean,—because the chief markets of the world lie to the westward, and it would be useless to go up the Baltic,—gravitate to Hamburg, or by the use of international routes swell the transit-trade of neighbouring nations.

25. Then again, man has turned his attention to overcome nature's obstacles, thereby bringing all Europe into touch with the sea; has joined North and Central Europe into one common market; and has opened an easy transit to the southern shores of Europe and the regions of the Black Sea.

26. The southern parts of Germany, belonging to the wine countries, do not come into competition with England, but, rather, are a market for us; while the northern districts, which are the more extensive, with resources and manufactures similar to those of Great Britain, must meet England as competitors, both for sale and purchase in foreign markets.

Germany has to carry her raw materials and finished articles farther than England has, at least by sea, and cannot be so secure in her frontiers as Great Britain. Hence, as far as position is concerned, *England has the advantage, except for Continental distribution*. For materials and machinery she is certainly *as well placed*,—Germany copied England in the latter. Where, then, has Germany the chance of competing with England on favourable terms? All other things being equal, it must be in knowledge rather than ability, and it is against competition of skilled intelligence that England has to equip herself.

27. Germany is divided into two of the great natural divisions of trade, namely, the "Baltic trade" (area 6) and the "general trade" (area 4), and is also an important con-

stituent to the southern trades, *i.e.*, Mediterranean, Adriatic, Danube, or Odessa, *vid* the "intermediate zone," which lies within its limits. The major portion of Germany has its sea-board on the Baltic: area 6 of the "Baltic trade" lies approximately between 10° and 21° E. long., and as far south as about 51° N. lat.

28. This nationality may be divided into the "Prussian Plain" and the "Prussian Tableland," the former embracing the whole of North and East Prussia, from Holland to Russia, a vast plain elevated in the south and south-west, and sloping towards the sea.

29. The mineral products of Germany are considerable, and comprise alum, amber, arsenic, agate, antimony, bog-iron, bismuth, baryta, building-stone, copper, chromium, cobalt, copperas, coal, gypsum, graphite, iron, jet, jasper, kaolin, lignite, limestone, lithographic stones, lead, mercury, manganese, millstones, marble, nitre, nickel, onyx, porphyry, peat, precious stones, potters' clay, slate, sulphur, sandstone, silver, salt, saltpetre, tin, and zinc, with basalt, greenstone, and honestone.

30. Amber, besides being collected in the drift on the shores of the Baltic, is now mined at Palmnichen and Kraxteppelin, and by dredging at Schwarzort, also by diving at both places.

Arsenic is found in Silesia (Reichenstein).

Cobalt in Saxony (Erz-Gebirge), valley of the Lahn, &c.

Coal in Silesia (Waldenberg), Saxony (Zwickau), Hanover, Westphalia (Dortmund), Rhenish Province, valleys of the Rhine, Saar, Ruhr, &c.

Iron, both spathic, hydro-oxide, &c., is found universally, but chiefly in Westphalia (Essen circle), the Harz, Erz and Riesen Gebirge, Thuringerwald, Silesia (Tarnowitz), valleys of Ruhr, Sieg, &c.

Lead in Silesia, Rhenish Province, Nassau, Westphalia, Saxony, Harz, &c.

Lignite in the Rhine valley, Westphalia (Dortmund), Saar, Silesia, Saxony. Halle and Bonn yield excellent **paraffin**.

Manganese in the Harz Mountains.

Salt in most departments except Brandenburg, Posen, Prussia, and Silesia.

Silver and **copper** occur chiefly in the Harz Mountains, Saxony (Mansfeld), parts of Hanover, Thuringia, Silesia (Tarnowitz), &c.

Zinc in Silesia (Tarnowitz), Rhenish Province, Westerwald, Westphalia, and the valleys of the Ruhr, Lahn, &c.

31. The area of Germany is 212,028 square miles, of which about 94 per cent. is productive. This area belongs to the *temperate zone*, the zone of **wheat and northern grains**, or beer and butter countries, and touches, in its **southern borders**, the *vine region* or wine countries. All cereals thrive well, and the vine flourishes in the south. The soil varies from light sand to heavy clays, and is divided into wheat lands, light loam, and sandy or stony lands.

32. The best-cultivated parts are Mecklenburg, Holstein, Hanover, the Baltic provinces, the banks of the Elbe and Weser (Anhalt, Magdeburg, &c.), West Saxony, Silesia, between the river Oder and the Riesen-Gebirge; while the least cultivated are the Luneburg lands in Hanover, Brandenburg, &c.

Forests cover about 30 per cent. of the soil, and abound in the Harz Mountains, Thuringer, Baden, Hesse, Waldeck, Saxony, Alsace, and Lorraine. In these last they cover 1,109,660 acres, or about 36 per cent. of the whole territory, and are only excelled by the Baden forests; they contain ash, beech, oak, pine, fir, birch, and elm. The beech equals 33 per cent. of the entire forests; the oak grows on the plains.

Pasturage for sheep and cattle is chiefly found in the Baltic provinces, Mecklenburg, Holstein, Oldenburg, Hanover, and the Harz. Swine are largely reared in Bavaria.

Wheat is grown in Prussia, Pomerania, the Baltic provinces, Silesia, Mecklenburg, Schleswig-Holstein, Saxony, and Hesse. Dantzic is the great export port. Wheat is also cultivated in the south, in the valley of the Danube, the Palatinate, Bavaria, &c.

Oats and barley are generally cultivated, and **buckwheat** in Silesia and Brandenburg; **rye** is universally grown.

Maize in the valleys of the Rhine and Neckar.

Hemp in Westphalia, Saxony, and Silesia.

Flax in Westphalia and Hanover,—both noted,—Brunswick, Oldenburg, Hesse, Saxony, Anhalt, Silesia, Prussia, &c. Memel and Marienburg are centres.

Beetroot in Saxony, Silesia, Brunswick, Pomerania, in the valley of the Rhine, and Bavaria in the south.

Madder in Saxony and Silesia.

Tobacco in the plains of Brandenburg and Pomerania.

As an example of the productiveness of a single State, Hesse contains 1,898,084 acres, of which 95.5 per cent. are productive, and grow barley, flax, hemp, hops, poppy, potatoes, rye, rape, spelt, tobacco, and the vine.

Other agricultural products consist of anise, buckwheat, beans, colza, chicory, cumin, fruits (apples, cherries, plums, &c.), hops, lentils, mustard, peas, pulse, rape, vetch, &c.

The vine appears in the valleys of the Rhine and Moselle (yielding Hocks and Moselle wines), Saxony, Brandenburg, Hesse, Nassau, Baden, Wurtemberg, Bavaria, Rhenish Province, the Palatinate, the valleys of the Neckar, Nahe, Glau, &c.

33. Local trade movements are by sea (Hamburg, Bremen, Baltic ports)—the Baltic coast is flat and cannot be approached except where the rivers have cut a deep channel; **by rivers and canals**, national and international; **by road and rail** through Belgium, Holland, France, Switzerland, Austria for the Adriatic or Danube, Russia, and Denmark.

According to the destination of the goods, or the desired speed in delivery of perishable articles, the "trade" is built up; thus either the General, Baltic, Mediterranean, or Black Sea, in accordance with whichever of the above-named routes is selected.

34. Statistics of the movements of trade and population show us that in 1871 the people numbered about forty-one millions, or 193 to the square mile; the general employment being agriculture, but with a tendency towards the industrial centres.

There are no accurate total trade returns available for the period from 1870 to 1874, but it is fair to assume, from data, that the total imports averaged £100,000,000 per annum, and the exports a like sum. For this period the exports to Great Britain averaged annually eighteen and three-quarter millions—having risen £1,000,000 over the average of the five preceding years; the imports from us were twenty-four and three quarter millions, an increase of £4,000,000.

By 1885 the population had increased nearly six millions, raising the density to 220 to the square mile; division of labour being one-third agricultural, one-third industrial, and one-tenth commercial. Saxony is the most densely and Bavaria the most scantily populated.

From 1880 to 1885 the total imports averaged yearly £160,000,000, and the exports a like figure; the transit trade alone in the last year of this period was valued at sixty-three millions sterling. The share of German trade which Great Britain held during this period was, of the exports twenty-four and three-quarter millions, and a contribution to the imports of eighteen millions. Including goods "*in transitu*," our imports to Germany in 1885 were valued at just over £27,000,000.

The staple merchandise that we received from Germany in 1885 were cereals (two millions), sugar (four millions and three-quarters), live animals (one million), bacon and hams (one million and a quarter). The respective averages of these from 1883 to 1885 were £2,750,000, £5,400,000, £1,500,000, and £1,500,000.

Of the imports, we contributed, in chief, cotton goods (three and one-fifth millions), woollens (two and three-fifth millions), machinery (one and a half millions), herrings (just over a million), and coal valued at one million sterling.

35. We thus draw conclusions that the population rose about one-eighth. On the assumption that the total imports and exports averaged £100,000,000 each during the 1870 to 1874 period, trade increased during the second term of years 60 per cent. on both imports and exports,

In the former period Great Britain held nearly one-fifth of the exports and one-fourth of the imports. Following the same ratio, in the next term the figures should have been about £32,000,000 exports and £40,000,000 imports; but in fact they were only 24½ millions and 18 millions respectively, being about one-sixth instead of one-fifth of the exports, and one-ninth in lieu of one-fourth of the imports,—a very heavy fall.

It is curious to note that English imports and exports for 1880 to 1885 period are exactly reversed compared with 1870 to 1874. There has been a great concentration of the people in the mining and manufacturing districts. *The tendency is to increase and extend extra-European and foreign German trade, but direct intercourse with Great Britain declines.* In the fifteen years from 1870 to 1885 we supplied Germany with more goods, and took less from her in inverse ratio; we did not increase our share in reciprocal service in a proportion equal to the general rise. For instance, German total trade increased 60 per cent. on both imports and exports, but we lost some 4 per cent. on exports and 14 per cent. on imports.

Examination Questions on Germany.

1. What part do rivers take in facilitating the gravitation of merchandise to the commercial centres of distribution? Apply the facts to the waterways of Germany.
2. What barriers are interposed by nature in Germany to free commercial intercourse; and how have these obstacles been overcome by human agency?
3. In what respects and in what localities do the resources and industries of Germany resemble those in England?
4. Name and localise the towns that owe their rise, or advancement as commercial centres, to their position as railway junctions.
5. Explain the distinction between German sea-borne or foreign and international trade, and compare the facilities which Germany possesses for each branch of commercial movement, respectively.
6. The two great factors of wealth being "materials and intelligence," show how far during the current century this second factor has contributed to the rapid advancement of Germany.

HOLLAND.

Geographical position, 1—Geographical features, 1, 2—"Dunes," dykes, and canals, 3, 12—**The effect of Dutch industry upon the country, 4—Commercial position, 5—Commercial activity, 4, 6-9 ; industries, 7—Characteristics of Dutch trade, 8—**The rivers that traverse Holland, 8, 9—**Rotterdam, 9-11 ; Amsterdam, 11, as ports—Internal trade, 12—Entrepôt towns, 12—Railway distributing centres, 13, 14—External, 14 ; and transit-trade, 14—Natural division of trade, 15—Mineral resources, 16 ; with localisation of same, 17—Agricultural resources, 18—Localisation of the principal agricultural produce, 19—Fishing, 20—Means of intercommunication, 9, 12-14, 21—Trade statistics, 22—Review of the movements of trade and population from 1872 to 1885, 23—Examination questions, p. 51.**

1. Holland presents to us a very flat surface and an extensive sea-board of about 470 miles, lying on the borders of the North Sea, with the deep inlet, the Zuyder Zee, penetrating into the heart of the country. Having no natural boundaries on the east and south, Holland joins with Germany and Belgium, and thus forms practically one natural area, giving her by waterways an excellent position for prosecuting commerce, especially transit-trade.

2. The great European plain stretching from the Russian steppes here finds a limit by the sea. *This portion is entirely composed of recent alluvial deposits*, sloping downwards to the coast, until in many places the land is actually below the sea-level.

3. *To prevent inundations, sandhills or "dunes" are preserved along the shore, while dykes and canals are cut throughout the country.*

4. Deprived of economic mineral wealth, with a soil apparently worthless, and with a cold, wet climate, it would seem that Holland must fail in the commercial race ; but the

people, who are industrious, patient, economical, and endowed with a perseverance that never tires, have, out of apparent impossibilities, established substantial trade.

5. For commerce Holland is well placed, with international waterways and railways, and peopled by some of the greatest traders of Europe, who have taken advantage of her splendid position to extend their connections on all sides.

6. Inability to prosecute manufactures profitably, through want both of minerals and fuel, has led the population to fishing, seafaring, and agriculture; consequently they are scattered, and not drawn to industrial town-centres, as in Belgium. The Dutch have long held a first place in supplying other nations with fish; and by their accumulations of capital they laid the foundations of commercial prosperity. In agriculture, their plodding industry has turned the country into a vast pasture, whence they reap great advantage by dairy-produce, besides raising the value of the land to an extraordinary extent. To their seafaring population they owe the position of being the "colonial produce" emporium of Europe.

7. Although Holland is not an industrial country, still, the Government has done much to encourage industries and manufactures; but, after all, these are small, and must be called "local," for they barely supply the home demand. Yet *Holland exemplifies "cheap carriage of raw materials and coal, enabling manufactures to be carried on."*

8. What, then, is Dutch trade? and how does Holland rank high as a commercial State? In three ways; *first*, by the produce of her pastures, by her fisheries, and by her oleaginous seeds and garden-flowers she is enabled to procure an exchange with England, Belgium, and Germany, her neighbours, for all the textiles, cereals, &c., she may require. *Secondly*, as the colonial produce emporium, she is able to disperse these sometimes costly, but now universally required, commodities throughout Europe. *Lastly*, by her waterways and railways, built by her own capital, she attracts a vast transit-trade from England and Belgium to Germany and Europe generally, and *vice versa*.

9. The great West European waterway, the Rhine, runs through Holland, and finds its outlet with the Maas, which carries down a large Belgian trade, at Rotterdam, a city foremost as the Dutch emporium and entrepôt. The Scheldt also traverses Holland for the last miles of its course, and adds to her commerce, not only in transit, but also in imports to Flushing and Terneuzen, to which latter place Bilbao sends iron ore cargoes, which find their way into Zeeland and Belgium.

10. Rotterdam is the leading commercial centre, owing to its position for mercantile business; for vessels prefer to discharge here rather than incur the extra run and risks of reaching Amsterdam. Amsterdam has long been noted as a banking and colonial emporium; but here the bulk of the sea-borne trade is or has been carried on by the old East India sailing-vessels.

11. Neither Amsterdam nor Rotterdam is commercially an "in-and-out" port, except for a few parcels of goods in vessels destined to complete their lading at another port. The principal external trade, excepting the sailing-vessels to Amsterdam and the grain and ore cargoes to Rotterdam, is carried on by the mail-lines and coasting-vessels. The coasts are somewhat difficult of access, by reason of the low-lying and gently sloping sandy shores.

12. By her canals and railways Holland conducts her internal trade, being in touch with Germany on the east and with Belgium on the south. The only *entrepôt towns* of consequence are Venlo and Roermond, on the direct line from the coast to the Crefeld and Dusseldorf circle of Germany, and Maastricht, which is placed on the eastern Belgian frontier.

13. The railway system, which derives its great importance from its international character, *has created a few important centres*; towns that stand at a junction with lines pointing north, south, east, and west, such as Tilburg, Utrecht, Arnhem, Zutphen, Zwolle, Meppel, and Groningen. These centres also act

as "*receiving towns*" for the country produce, which is thus easily and rapidly distributed.

14. **The propinquity of the Rhenish centres of industry and the results of German enterprise drifting down the Maas assist Dutch transit-trade.** The home industry being scattered, the results must perforce, owing to the want of concentration, gravitate to the nearest "*market towns*" and railway centres for distribution; the produce, being generally perishable, favours the rail and mail lines. Hence, except for the supply of deficiencies, the external trade of Holland by foreign vessels is not very extensive, the whole movement being more dependent upon speed for short journeys than interchange by long voyages, except in the case of supplies drawn from the Dutch East Indian possessions.

15. **Holland is included in the "general trade" limits, practically constituting a trade in itself, except *vid* Rotterdam, where international transit is carried on.**

16. **Holland loses the advantages of mineral wealth enjoyed by the sister kingdom of Belgium; and peat, potters' earth and clay are the only "earthy" subjects of commercial value, although some bog-iron is stated to be raised and exported in Yssel and North Brabant.**

17. **Peat is obtained throughout Holland, but in an especial degree from the districts of Drenthe, Friesland, Groningen, Oberyssel, and North Holland.**

18. **This country belongs to the temperate zone of the beer and butter districts; the rearing of cattle and consequent dairy-produce constitute the chief occupations,—pasturage is therefore universal. Other produce consists of bulbs and garden-flowers, buckwheat, beans, beetroot, barley, chicory, colza, flax, fruits, flowers, hemp, madder, millet, oats, pease, potatoes, rye, truffles, tobacco, vegetables and wheat.**

19. **Bulbs and flowers centre in Haarlem.**

Flax and hemp are cultivated in Central Holland.

Rye is the principal cereal grown, and barley for "*pearling*" is also cultivated to some considerable extent.

Tobacco round Amersfoort, Hoorn, and Arnhem.

Truffles and fruit in the valleys of the Rhine, Meuse, and Waal; in South Holland and Zeeland.

Wheat, millet, and madder favour mainly Utrecht, Friesland, and Zeeland. There are no forests and but few woods.

20. Fishing of all kinds is vigorously prosecuted on the coasts.

21. Local trade movements are either direct by sea, by the many canals which intersect the country in all directions, and form with the rivers Rhine and Meuse unparalleled "international waterways," or by the mail and "link" railway lines traversing the country.

22. Trade statistics show us that in 1872 the population numbered very nearly three millions and three-quarters, being equivalent in density to 180 to the square mile, *the tendency to town concentration being somewhat marked.* From 1870 to 1874 the total general imports averaged 66½ millions a year, and exports 56½ millions; while the home imports averaged 41½ millions, and nearly 53 millions exports. The exports to Great Britain averaged close upon 14 millions, while the imports from us were valued at 14½ millions; the staples being butter (2 millions), live animals (1½ millions), and cheese (1 million), *outwards*; with cotton yarn and manufactures (4½ millions), woollen goods (3 millions), and iron (2 millions), *inwards*.

By 1885 the population had risen to about four millions four hundred thousand. From 1880 to 1884 the total estimated "home" imports averaged 82½ millions annually, and the exports 60 millions. During this time our share in Dutch trade averaged 25 millions *for exports* from Holland, and we *sent goods* to the value of 9½ millions. The staple exports were butter and butterine (4½ millions), live animals (£1,000,000), cheese (nearly 1 million), sugar (just over 1 million), iron (£900,000), wool manufactures (1½ millions), cotton goods (three-quarters of a million), silk goods (2 millions)—chiefly in transit—and gin valued at £54,000.

The imports were cotton yarn ($2\frac{3}{4}$ millions), woollen yarn (just over a million and a half), and iron (£800,000).

23. From this review we trace the **history of trade** for the fifteen years. The population *increased* nearly one-fifth, the total imports for home consumption *doubled*, and the exports *increased* between 13 and 14 per cent.

English trade was interested in imports during the first period to the extent of about one-third of the total, and one-quarter of the exports. To preserve the same ratio during the second term, the import figures should be some $26\frac{1}{2}$ millions, and exports 15 millions; they were really $9\frac{1}{2}$ and 25 millions respectively, thus indicating that the Netherlands, even with an increased population, had less need of our manufactures and goods, and yet at the same time they supplied us with £10,000,000 worth more of their surplus produce,—much of which is really obtainable at home, notably butter and butterine, which increased £3,000,000.

In the supply of our staple goods we lost 50 per cent. In point of fact, the imports from England were 5 millions less than ten years previously, we holding about 42 per cent. of the exports, and only 12 per cent. of the imports, as against 25 per cent. and 33 per cent. in 1870 to 1874.

The large increase noticeable in Dutch total trade is assisted in great measure by the unrivalled facilities for transit enjoyed by Holland, which stands second to none in Europe in this respect.

Summarising from this sketch, we find that **England**, during these fifteen years from 1870 to 1885, lost 35 per cent. on imports, but gained about 85 per cent. on exports; total Dutch trade having risen 100 per cent. on imports and 15 per cent. on exports. With the exception of England and France, every other country, during this period, increased their sales to Holland.

BELGIUM.

Geographical position, 1, 3, 5—Belgium a country of manufacturing industries, 2, 14, 27; centres, 2, 6, 9—**Geographical features**, 3, 4, 14—The river Scheldt, 3, 14; and Antwerp, 3, 14—Belgian railways, 5, 14; canals, 6, 14—Physical features as aids to commercial movements, 6—**Commercial activity**, 6—9—International trade, 7—Frontier entrepôt towns, 7; German, 8; and French frontiers, 9—Railway centres, 10—Contrast between Belgian and English industrial sites, 11—*Characteristics of Belgian trade*, 12, 24, 27—Sources of supply for home industries, 13, 15—**Natural division of trade**, 16—**Mineral resources**, 17—Localisation of the principal metals and minerals, 18—**Agricultural resources**, 19—Localisation of the chief agricultural produce, 20—Means of intercommunication, 6, 7, 10, 21—**Trade statistics**, 22—Review of the movements of trade and population from 1873 to 1885, 23—Tendency of the trade, 25—Belgium becoming the European emporium for wool, 26—**Examination questions**, p. 51.

1. The first point to strike a student in reading the map of Belgium is the fine position of the kingdom for commerce. Bounded on the north by enterprising Holland, on the south by France, and on the east by the German Empire, she adjoins the chief trading nations of the European continent, and thus attracts a vast transit business from Central Europe, in goods destined for sea-borne distribution.

2. Industrially, Belgium stands in the same condition as England,—pre-eminently a mining and manufacturing country. Though of small area, the surface is studded with towns, each having its specialty, notably in textile fabrics, as Brussels, Mechlin, Courtrai, Ghent (the Manchester of Flanders). Liège with its neighbourhood is renowned for its mining and attendant industries, while Belgian agricultural produce is esteemed.

3. A limited coast-line constitutes the western frontier, Ostend and Nieuport being the only harbours, and available solely for small vessels. Commercial movements are really confined to Antwerp on the Scheldt, a river whose course is rendered tortuous by sandbanks, and whose lower reaches run through another nationality. Yet Antwerp, situated some considerable distance up the river, by improving its water approaches, by its excellent dock accommodation and extensive warehouses, has attracted such an amount of commerce *that it ranks as first of the Continental ports*. The estuary of the Scheldt is immediately opposite the mouth of the Thames—an important feature favourable to the prosperity of Antwerp, commanding the carriage of goods from the Continent to England and *vice versa*.

4. Belgium for the most part is flat, as implied by the appellation of the Low Countries or South Netherlands. Towards the east higher ground supervenes, where the Ardennes extend, forming one of the richest districts in Europe, as also one of the most commercial; the densest population, it is said, is in Flanders and Brabant.

5. The Belgian railways are, mostly, under State control, and transport charges are moderate. The people are active and adapted for commercial pursuits; their position on the North Sea attracts commerce from abroad, theirs being, except France, the nearest country to England.

6. As *internal trade is of more direct importance to the bulk of a population than external*, and is dependent upon means of communication and transit, Belgium has further promoted intercourse by the construction of a perfect system of canals, which, united with the rivers flowing through the Belgian plain from the highlands of the Ardennes, give cheap and easy access to France, Holland, and Germany. Then, again, the resources on the eastern side of the Ardennes, in the south-east, and the mining circles of Mons, Namur, Charleroi, and Liège have the river Maas to assist the con-

veyance of merchandise, which river connects directly with that great western artery, the Rhine.

7. The international entrepôts are not numerous. *Along the northern frontier*, between Holland and Belgium, there is really no need of entrepôts, for the "set" of goods is chiefly from west to east and *vice versa*, and rarely from north to south; *i.e.*, goods coming into Belgian or Flemish ports are destined, as a rule, for the countries themselves or for Central Europe, and not to be exchanged between the two small kingdoms whose economic resources are very similar,—excepting in the case of minerals, which, if required, are easily transported by the Maas. Therefore the international lines and canals run between these countries without creating border emporiums.

8. *On the German frontier, however*, there is a wide expanse to be fed; still, even here the emporiums are almost all on German soil. The border towns nearest Belgium are on the Maas, notably Maaseych and Maastricht, which is a Dutch town, but being almost on Belgian ground, acts as an entrepôt between Belgium and Germany; farther south, Verviers and Limbourg are the only places that act in this capacity.

9 There is a difference, again, *on the French frontier*. Much of the industrial life of North-East France is continued into Belgium; consequently an active interchange takes place, and an *industrial circle*, including Valenciennes, Condé, Tournai, Courtrai, Roubaix, and Lille, connects common interests.

10. The chief railway centres are Mechlin, the most important, Antwerp, Ghent, Brussels, Charleroi, Namur, Hasselt, and Liège. In the small area of Belgium these centres command every corner of the kingdom, and merchandise easily ebbs and flows for further distribution by river, canal, or international railway.

11. There is a notable difference between the situation of Belgian industrial sites and those of English. *The centres of textile manufacture in the latter are situated on the coalfields,*

and in the midst of the mining industries ; but in Belgium the mining industries cling to the hill country from Liège to Mons ; and where they leave off, the textile industries commence, and spread over the rest of the country. The French centres lie on the coalbeds of North-East France, but this Belgian circle is really off its confines. The only exceptions are the ancient woollen manufactures of Verviers and Liège ; but the proximity of fuel and the ease of transit remove all obstacles, and these industries are remuneratively prosecuted.

12. Belgium is a congerie of towns ; her country harvests cannot, therefore, support her town populations, and she has to seek foreign commerce. *She thus stands in the same category as England, namely, importing nearly all food-products, with the majority of raw materials for manufacture, and exporting finished goods, with a little coal and iron ; these chiefly to Germany and the Netherlands.*

13. For her linen manufactures, which are very important, Belgium has a fair supply of *flax*, which is noted, but has to be supplemented for her requirements from the Baltic sea-board.

Her cotton comes mainly from the United States, Brazil, India, and the East ; wools direct from the River Plate ; while Australian and Levant wools, Angora, Angola, and merino, are drawn from England's emporiums, Germany easily forwarding her noted Berlin wool. The slopes of the Ardennes feed flocks of sheep, which assist the home supply.

14. This map of Belgium, therefore, shows a plain, extending from the sea to the eastern hills, covered with towns all prosecuting active industry ; reticulated with railways and canals, from the industrial centres to the seaport, Antwerp, or to the border emporiums ; while the hill country and eastern side, served by the navigable Maas flowing along the foot of the mountains, are busy with mining industries, or the rural occupations of the vineyard, cereal, hop, and flax fields, all finding easy distribution by the Maas or by rail.

15. Thus Belgium, again, is in the same economic position

as England, exporting and importing similar commodities; hence the goods of each country and the inquiries or requirements from each country must meet in foreign markets. The question thus arises, Which nation can offer the best article? For it is an economic principle, that the best goods will be the ones sold; and the sale of merchandise to the purchasing country determines, in great measure, the power of purchasing home requirements in return.

16. Belgium has no descriptive trade title, beyond its comprehension in the "general trade," but it is admirably adapted for transit, of which it has a very large share. For its size Belgium is the most active European nation for the receipt and delivery of international goods. The total area is 11,373 square miles, of which about one-third is under wheat-cultivation.

17. The mineral resources have aided much in developing the country. We find, *inter alia*, coal, copper, fine clay for pottery, fire and brick clay, iron, kaolin, lead, marbles, manganese, millstones, nickel, porphyry, polishing-stones, sulphur, slate, sandstone, and zinc.

18. Coal occurs in Hainault, Liège, and Namur (Mons, Charleroi, and Liège), and is a continuation of the north-east French beds.

Iron abounds round Charleroi, Liège, and in Luxemburg. The Maas iron is renowned.

Lead near Verviers and Liège (Vedrin).

Manganese at Liège and Namur, esteemed for bleaching properties.

Marble,—the black marble of Dinant is well known.

Zinc in the province of Liège is noted.

The elevated parts of the country are formed by ramifications of the Ardennes. Liège is the great centre of productive industry. North-East France and Belgium are alike in industrial life, being situated on the same geological formation.

19. This area belongs to the beer and butter countries. The

resources of the **vegetable kingdom** are various, and comprise barley, buckwheat, beetroot, colza, clover, chicory, flax, hemp, hops, honey, oats, pulse, rye, wheat, and pasturages, whence dairy-produce is largely distributed; whilst the vine is cultivated on the sunny lower slopes of the Ardennes. About two-thirds of the whole kingdom is under cultivation, whilst eight-ninths are profitably used, only one-ninth lying waste.

20. Barley is chiefly cultivated in the "Polders" (West Flanders).

Beetroot in Hainault, Brabant, and Liège.

Flax and **hops** are universally grown, the former to a special degree and very largely in Flanders.

Forests cover about one-fifth of the entire surface, and consist chiefly of oak, from which a large quantity of bark for tanning is supplied.

Pasturages of admirable quality in the seaboard districts and Ardennes.

Rye in Flanders.

Wheat is cultivated chiefly in Hainault, Brabant, Namur, Liège, and Limburg,—that of Liège is especially noted.

21. Local Trade Movements.—Merchandise is to a great extent "*in transitu*" to and from the interior of Europe by the magnificent system of State railways linking with other "international thoroughfares," and the river Scheldt and its tributaries. The canals connecting France, Germany, and Holland with Belgium present admirable facilities for reaching the sea-coast, whence is direct communication with every part of the globe.

22. According to **STATISTICS**, we gather that in 1873 the population was about $5\frac{1}{2}$ millions, equivalent to 460 to the square mile; one-fourth being estimated as agricultural, one-fourth manufacturing and trade, *with a tendency towards concentration*.

From 1870 to 1874 the yearly average of the total imports was $146\frac{1}{4}$ millions, and of the exports 122 millions; of these the home imports were 51 millions, and the exports 39

millions, the general imports being 95 millions, and the exports 83 millions. Of these amounts, **Great Britain contributed to the imports 6 millions**, and received 13 millions of the exports; the staples outwards being silk manufactures ($2\frac{3}{4}$ millions), flax (£1,000,000), butter (half a million), and live animals, chiefly sheep (a quarter of a million); inwards, iron (£1,000,000), wool manufactures (£500,000), and cotton manufactures (£750,000).

In 1885 the population was reckoned at over $5\frac{3}{4}$ millions, or 515 to the square mile, about one-seventh of whom were engaged in agricultural pursuits.

From 1880 to 1884 the total home imports averaged 57 millions a year, and the exports $53\frac{1}{2}$ millions; in 1884 the transit trade alone was valued at over $53\frac{1}{2}$ millions sterling. The countries sharing in the imports were in the following order: France, the Netherlands, Germany, and Great Britain; and in the exports, France, Great Britain, Germany, and the Netherlands. Our share of the imports for this term of years averaged 8 millions per annum, and of the exports $14\frac{1}{2}$ millions; the staple merchandise was cotton goods (£2,000,000), woollens ($1\frac{1}{2}$ millions), and iron (a quarter of a million), inwards; woollen yarn ($1\frac{1}{4}$ millions), silk manufactures ($1\frac{3}{4}$ millions), flax (three-quarters of a million), sugar (half a million), iron (three-quarters of a million), butter (a quarter of a million), eggs (three-quarters of a million), and cotton manufactures valued at £350,000, outwards.

23. Looking at the above, we draw conclusions that from 1873 to 1885 the population *increased* about one-tenth. Without referring to the general or transit-trade, which, however great an auxiliary towards a country's well-being, is not comparable as against home industries and activity, we find that during these years, the total imports *increased* about 12 per cent., and exports nearly 40 per cent.

In 1885 the staple exports of 1874 to Great Britain had all *considerably declined*; while other produce—ranking now as staples—had been added, notably sugar, eggs, woollen

yarn, and manufactured goods; and, in the same period, we notice that England's **imports into Belgium largely increased**, the value of cotton goods having risen some 150 per cent., and woollens 200 per cent. Our supply of iron to Belgium decreased 75 per cent., but it is worthy of note that during 1880-84 we bought iron of Belgium to an extent equal to three times the value of iron we sold her, and yet in 1870-74 iron was not known as an export staple, but as a considerable item in our sales to Belgium.

24. *A curious feature of this trade is, that we sell to and buy of Belgium commodities similar to our own productions, notably cotton manufactures and the iron referred to above, and that we sell woollen yarn and buy woollen manufactures, although we are able to, and do, manufacture woollen goods ourselves.*

25. It would seem that Belgium seeks to sell to us her own productions and manufactures in increasing quantities, and that we are willing to buy, but that Belgium is tardy in taking our goods in exchange. On the averages 1881-85 we did not buy proportionately so heavily of Belgium, while we sold her rather more; but in proportion to the increased "turnover" of Belgian trade, both our imports and exports should have given much larger results. *Thus from 1870 to 1885 we lost about 8 per cent. on exports and gained 2 per cent. on imports, with a drooping tendency throughout, although the Belgian total trade, during the same period, increased 12 per cent. on imports and nearly 40 per cent. on exports.*

26. **Belgium is becoming the European emporium for wool**, as also for exports to Australia and China; England going hand-in-hand with her for joint cargoes. The tendency of Belgian total trade is to increase, but that of England with Belgium to decrease. Is there any solid reason for this? Let the student with the facts before him trace the cause.

27. **Belgium is mainly a manufacturing country**, especially in iron, textiles, and beet-sugar. *Against these industries, except the last, we have to compete; one important feature*

in our favour being that most of our rivals' over-sea carrying-trade is by English vessels, thus increasing our profits. As a noteworthy fact, the Consuls of other commercial States have drawn the attention of their Governments to Belgian enterprise throughout Europe ; the most remarkable example of progress being with some of the Turkish provinces.

Examination Questions on Holland and Belgium.

1. Contrast the physical aspects and climate of Holland and Belgium.
2. Describe the changes wrought by the Dutch in the superficial appearance of their country, and the means they have used to reach their present condition of prosperity and comfort.
3. Give an account of the industrial and commercial activity of the Dutch from the threefold view of their fisheries, agriculture, and foreign trade.
4. Trace the industrial analogies between Belgium and England, giving corresponding localities and towns. Also contrast the industrial sites of the two countries.
5. Describe fully the river Scheldt, with its port of Antwerp, and explain in detail its vital importance to the well-being of Belgium.
6. Enumerate the chief agricultural resources of Belgium, and make special reference to the trade in wool.

FRANCE.

Geographical position, 1—Contrast with England as to commercial movements, 1, 13, 21, 21*a*; and with Germany, 2, 23; with Austria-Hungary, 17; and with England as to industrial life, 7; to industrial sites, 9—**Surface view**, 3, 10*a*—**Commercial activity**, 2, 12, 15, 24–26—Climate and soil in relation to industrial life, 4—The climatic zones, 5, 30; their relation to English supplies or competition, 6—*Character of French trade*, 7, 8; *of its external trade*, 8, 13—The textile centres, 10; and coalfields, 10, 29—Contrast with Germany as to physical features, 10*a*—French physical features in relation to industries, 10*a*—The rivers of France, 11—The woollen industry, 14; centres, 14—General industrial divisions of France, 15—Wheat-production, 16—French international trade, 18, 22, 23; French transit, 19; and foreign trade, 20–24—Entrepôts, emporiums, and frontier towns, 20, 25—Importation of English coal, 21*a*—**Natural division of trade**, 27—**Mineral resources**, 28—Localisation of the principal metals and minerals, 29—**Agricultural resources**, 30—Localisation of the chief agricultural produce, 31—Means of intercommunication, 10*a*, 11, 32—**Trade statistics**, 33—Review of the movements of trade and population from 1872 to 1886, 34—Tendency of French trade with England, 35—**Examination questions**, p. 68.

1. The geographical position of France for commercial enterprise is admirable, being washed by the English Channel, Atlantic Ocean, and Mediterranean Sea, and adjacent to the most advanced States of Europe, namely, Belgium, Germany, Switzerland, and Italy, with Spain at the south-east extremity. She is better placed than England for the Mediterranean trade, and her ports give equal facility of intercourse with the States of Northern Europe and those of the trans-Atlantic Continent.

2. France has no occasion to distribute her varied products through any foreign port, as Germany uses Trieste.

The French ports are the natural outlets for merchandise quitting Europe; they owe this position very largely to the excellent means of communication, national and international.

3. The general aspect of the country is diversified, but it is more a region of plains than mountains, notwithstanding that the north-east, south-east, and some of the central parts are elevated.

4. From the geological formations, the soil varies very considerably. Climatic conditions, too, are changeable. *The absence of any great extent of sterile lands makes France one of those countries where all phases of productive labour can be carried on, and busy industrial sites are found in most parts of the country.*

5. To read a map of France correctly we must distinguish the climatic zones. *These form five well-marked regions.*

a. The north-east, Vosges—temperate and similar to Central Germany, with hot summers and cold winters.

b. The Seine basin—climate equable, similar to that of England and Belgium; favourable for herbage and orchard fruit.

c. The south-west—warm temperate, with very hot summers, and suitable for the cultivation of the vine.

d. The south-east—temperate, winters fairly cold and summers fairly warm.

e. The Mediterranean region—the hottest in France, similar to Italy and Spain, favourable for the mulberry and orange.

6. *From this sketch we may surmise, so far as agriculture is concerned, what parts of France are our customers, our suppliers, or else our competitors.*

7. We must also examine her industrial sites, which, like those of England, lie on the mineral fields. France, whose soil yields in profusion a great variety of raw agricultural materials, ranging from the orchards and grains of the north to the orange and mulberry of the south, is still unable to supply its people with all food requirements.

8. As industrial occupations increased, a concentration

of people into cities and towns occurred, and as inquiries arose for more food and luxuries, France had to apply to other countries for supplies.

England, during the European struggles of the early part of the nineteenth century, got a footing in foreign markets for her manufactures, and continually improved these manufactures. *How, then, was France to compete with her? How was she to pay for what she required from other countries?* She had colonies from which she could draw some produce in exchange for her own manufactures, but this did not constitute external trade or international commerce. So she traded with England, purchasing machinery for her own textile, mineral, and metal works, and studied beauty of design. She also initiated a study of commerce, with the result that her mineral fields are now covered with works, her goods are carried to all parts of the globe, and she has a name for artistic form and delicacy of workmanship. Her industrial sites, distributing centres, and facilities of transport are both the means and the effect of the scientific course which France has pursued.

9. Over such an area the internal commerce is more diffused and broken-up than in England; for whereas, in the cotton manufactures, for instance, we have one great centre—Manchester—France has several smaller ones, and similarly in woollens and metals.

Again, in England the great textile industries are on the one central coalfield, partly because of ease of distribution; but in France each coal region, of which there are four groups, has its textile manufacture and centre, varying only in quality.

10. For instance, there are the textile factories of the north-east coalfield, with St. Quentin, Valenciennes, Lille, &c., as centres; on the Saarfield with Troyes; on the central with Tarare; and on the St. Etienne field with Lyons. There is also Rouen, the Manchester of France, not on a mineral field, but owing its position to ease of procuring fuel, to the imports of the raw material coming direct to the town without

"breaking bulk," and to being in direct communication with England, Paris, all France, and with the open sea.

a. Another reason of this diffusion is, that France is an undulating rather than a mountainous country. Note, for example, in North and Central Germany, how the mountain-range entirely limits the manufacturing sites to the one side, and that the easiest for distribution; and compare with France, where an immense facility is given by the ease with which direct communication over the whole country can be effected.

11. Five navigable rivers *penetrate the centre of the country*, and, by reason of its configuration, many tributaries and branches flow; *but the most important point, commercially, is that each sea receives at least one first-class river, and every part of the country has ready transit to the sea by waterways.* Further, intelligence has improved this position by joining each river-basin with others, allowing free intercourse in every direction. Hence, barges and other craft load and discharge their cargoes at many inland towns, thus contributing to the number of distributing centres.

12. No country in Europe shows better examples of centre to centre and circle to circle circulation, each sea-board having its important seaport, or distributing point, and each sub-area its smaller circle.

13. For industrial raw material this country is indebted to the same countries whence England draws her supplies, but instead of staples coming to *particular* ports, as with us, *each coast receives all commodities, and distributes to the nearest fields.*

Cotton from the Levant, Turkey, Egypt, or the East will come to **Marseilles** as the nearest port, whence it is distributed to the **St. Etienne** and **Lyons** circles, or by the **Languedoc Canal** to the centres of the south-west. That from America or the English emporiums comes to **Havre, Rouen, or Bordeaux**, and is thence similarly distributed to the northern and eastern circles.

14. Again, in the woollen industry there are at least seven

groups, namely: (a) **North**, embracing Cambrai, Roubaix to Amiens and Abbeville; (b) **Normandy**, with Elbœuf, Louviers, and Rouen; (c) **North-East**, with Sedan and Rheims; (d) **East**, with Nancy; (e) **Isère**, with Vienne; (f) **South**, with Lodève, Bedarrioux to Carcassone; and (g) **Centre**, with Limoges, Châteauroux, Romorantin, &c., as centres. For these wools, **Marseilles**, the great emporium and distributing centre, lies nearest the fields of production. The northern parts also draw from English and Belgian emporiums.

15. **A résumé of the industrial circles will make the natural gravitation, or ebb and flow, clear.** (a.) **North**, from Lille to Sedan, Rheims, Paris, Rouen, and Abbeville, *a very active industry both in mineral, metal, and textile work*, placed on the fields of the Nord, which extend into Belgium, with Havre as the chief gravitating and distributing centre, followed by Dieppe, Boulogne, and Paris for goods sent in transit by rail. (b.) **East and North-East**, Mulhouse to Creuzot, Lyons, St. Etienne, &c., *with iron, coal, and silk industries*, so centrally and favourably placed, and served by canal and rail, that it is equally easy to gravitate to Havre, Bordeaux, or Marseilles, in accordance with supply or demand. (c.) **Central**, Limoges, Nevers, Cosne, &c., *iron, wool, and potteries*, with Bordeaux or Marseilles as ports. This circle is not so active. (d.) **South and South-East**, *more backward still*, Carcassone, Mazamet, Toulouse, Montpellier, and Marseilles, with the last as the distributing centre. (e.) **South-West and West**, Tulle, Vienne, Agen, &c., with Bordeaux as the centre: *this circle has, however, but little activity.*

16. **France is one of the greatest wheat-producing countries in Europe**, and this is by far the most important of her agricultural industries, covering one-fourth of the whole cultivable area. Still, the produce is quite insufficient for her population, and she draws from India alone, by Marseilles, quite 150,000 tons per annum.

17. With her vast extent of sea-board, France contrasts with Austria-Hungary in the direction of her commercial activity,

the movements by sea being equal in volume to twice those by land.

18. With her land frontiers on the east, France must do a large *international* trade, assisted by the canals that join the German, Belgian, and Dutch river systems, and the railways which link centre to centre.

19. French transit-trade is of two kinds: first, goods "in and out;" that is, goods coming into an emporium port, being discharged, warehoused, and then shipped again from the same port; and secondly, goods that after discharge cross the country. *Certain goods in "transit" are held free from custom's tariffs*, which, combined with the position of France as an intermediary, assist this trade.

20. With free internal interchange, *there are, of necessity, many entrepôts and emporiums*, the most important being **Marseilles, Havre, Bordeaux, Nantes, Dunkirk, Rouen, Bayonne, and Boulogne**, besides the extensive inland centres of **Paris and Lyons**.

France transacts a large external trade, in which England joins, and we shall be able to read our map the clearer by analysing the commercial movements between France and her neighbours.

21. From England she purchases cotton-wool, coal, wool of all sorts, silks, coffee, caoutchouc, and other goods held "*in transitu*;" also native copper, iron, tin, &c., and manufactures both textile and metallic. She sells in exchange seeds, silks, butter, cereals, brandy, fruits, wines, beet-sugar, confectionery, eggs, haberdashery, dresses, and textile goods.

These goods cross "the Channel" to and from our English ports, and the movement is easily explained. England produces no wines, is deficient in cereals for food, has a taste for the "nick-nacks" of France; in "fashion," besides, French "style" is adopted. Hence, England buys French products, and often sends over yarns and tissues to be returned as French goods, the transaction being mutually profitable. On the other hand, England is the home for machinery, which France,

wishing to copy, buys from us, as also raw material to make up, for home consumption, or to pass on to neighbouring States.

England, again, is the great wool centre, and London a colonial produce emporium. France, requiring an extra supply of these products, can procure them at a few hours' notice.

a. Although seemingly strange that coal should be imported into France, it is easily understood as an economic question. Nearly all the English coal goes to the ports extending from Dieppe to Bayonne, a district embracing none of the great French coalbeds; very little to the higher Channel ports. Why? Because the north-east French coalfields supply the requirements of this industrial circle, but the west and the south-west of France are far removed from the native beds; hence the question arises, Which is the cheapest way of procuring this commodity? And as sea-transit is invariably cheaper than carriage by land, the former method of conveyance is adopted.

Further, *small coal*, as an article in great demand for the manufacture of "patent fuel," is very generally shipped. Lastly, the great ports, as the termini of railways, add another reason for this shipment of coal.

22. With regard to international trade with Belgium, textiles are exchanged for similar reasons, with the additional incentive that the French and Belgian fields of industry are but one large area; hence interchange on the frontier from one part of the field to another is the natural result.

Again, food-produce of a similar nature oscillates between the two countries among the border populations, for in these busy circles industrial life draws the people away from agriculture; hence agricultural produce follows the population to the towns.

Each country interchanges with the other its own specialty; thus France buys the coal, coke, and zinc of Liège and the well-known marble of Dinant, besides the specialties of Brussels, Ghent, &c., while Belgium takes in exchange the wines, fruits, and finished textile goods of France.

23. In the case of **Germany** the same economic principle is at work; the Saarbruck coalfields, adjoining the industrial circle round Nancy and Rheims, induce France to purchase this commodity for the *vin ordinaire* of the Côte-d'Or, which lies within easy reach of the German frontier; while the forests of Alsace, the Black Forest, &c., add inducements for the purchase of timber, which finds a floatage entrance by means of the Rhine and Rhone Canal. As in the case of England and Belgium, the *specialties* of each country are sought by the other; **France** requires the potteries of Dresden, the wools of Berlin, the cattle, horses, and hides of the Prussian plain; while in return **Germany** buys the porcelain of Sèvres, the *bijouterie* of Paris, the wines and fancy textiles of France generally.

24. Examples could easily be multiplied, but the natural commercial movement, the outcome of man's wants and increase in intelligence, can now be traced. Whether the spices and colonial produce of the Dutch emporiums,—the *horlogerie* of Switzerland,—or the marble, hemp, and silks of Italy,—France exchanges for these the surplus of her own commodities; and thus are gathered within one State the varied riches of every clime, be it raw materials or manufactured articles,

25. As the seaports are the distributing centres and gravitating points of the north, south, and west; so, on the east, there is a succession of frontier towns which act as entrepôts. For instance, Lille and Valenciennes, in connection with Courtrai and Namur, are intermediaries between France and Belgium. Similarly, Mezieres, Sedan, Nancy, and Belfort answer to Luxemburg, Metz, and Mulhausen; and although from the borders of Switzerland to the shores of the Mediterranean, the mountain-ranges make natural barriers between the adjacent countries; still, man's ingenuity in piercing these mountain masses has created entrepôts on either side, connecting France with Switzerland and Italy.

26. The map of France, then, shows the scene of one vast ebb and flow of commerce,—embracing the whole country,

north, south, east, west, and centre, with industrial work of various kinds on the different geological formations,—and exhibits the alternating tides from the seaports and frontier towns to the central circles. *The natural gravitation throughout is by the waterways, assisted by railroads, in many instances along the banks of the streams.*

27. France overlaps three trade-areas. The north and west belong to the **General trade**; the south, to the **Mediterranean trade**; and *the space between constitutes the Intermediate zone.* The country covers an area of just upon 205,000 square miles, almost exactly four times that of England proper.

28. The mineral wealth of the country is very considerable, comprising amianthus, amber, alabaster, anthracite, basalt, bismuth, bitumen, coal and lignite, chromium, copper, chalk, cement, granite, gypsum, iron, lead, lithographic stones, manganese, marble, millstones, kaolin, peat, silver, slate, sand and limestone, salt, porphyry, and zinc, with jet, coprolites, and paraffin shales.

29. Cement in departments Pas-de-Calais, Yonne, Haute Marne, Côte-d'Or, Bouches du Rhone, and Lot.

Copper and zinc are rare.

Coal abounds in many parts. The beds are seventy-one in number, if not more, but they can be designated under four classes:—(a.) **North coalbeds**, Anzin, Valenciennes, Denain, and Condé; these are an extension of the Belgian Hainault deposits. (b.) **The north-east or Saar beds**, being a continuation of the German beds of Saarbruck and Lorraine. (c.) **The central beds**, covering a large area, that of the basin of the Saône et Loire, and that of the Loire, the first including the centres of Le Creuzot, Blanzy, &c.; the latter, St. Etienne, Rive de Gier, St. Chamond, &c.; this group enters also the departments of Gard (Alais), Aveyron (Aubin, &c.), Tarn (Carmaux), and Hérault (Gervais). (d.) **The beds of the west** cover the circles of La Vendée, Maine, Cotentin, &c. The Bouches du Rhône department contains the largest beds of lignite in France.

Iron exists in great abundance. There are twelve classes or regions for this metal, which lies in some cases contiguous with the coalfields and limestone deposits, and thus fosters industries. The departments of Cher, Haute Marne, Haute Saône, Nord, and Moselle are the richest and best worked for iron.

Lead in Finisterre, Lozère, Puy de Dôme, and Hautes Alpes.

Manganese extensively in Saône-et-Loire (Romanèche), Dordogne, &c.

Marble in six well-known districts: (a) **North**—Boulogne, Maubeuge, and Givet; (b) **West**—Le Mans and Sablé; (c) **Central**—Chomérac; (d) **Pyrenees**—Campan, St. Beat, Bagnières de Bigorre, Cannes; (e) **Alps**—Grenoble, &c.; and (f) **the island of Corsica**.

Salt extensively exported from the south sea-board, especially Hyères.

Slates in Angers, Châteaulin, Ardennes, &c.

30. The principal element in the national wealth is agriculture. *The climatic zones* (§ 5), described by their botanical produce, are—(a.) **The zone of pastures, cider, apples, and English orchard fruit**, from the English Channel to a line drawn from Guérande (Loire-Inf.) to Coblenz, passing just north of Paris. (b.) **The vine zone**—from this line south to a line from the mouth of the Gironde to Spiers. (c.) **The maize zone**—from this line south to a line from Olette by Carcassone, St. Pons, Lodève, Le Vigan, Alais, Aubenas, Nyone, and Digne, to the hills. (d.) **The olive zone**—south of this to a line from Toulon to Villefranche. (e.) **The orange zone**—south of this line to the Mediterranean Sea.

About nine-tenths of the soil is productive, and among agricultural produce appear barley, buckwheat, beetroot, colza, chestnuts, fruits, figs, flax, hemp, hops, haricot, lentils, madder and other dye-plants, maize, millet, mulberry, medicinal plants, nuts, olives, oats, oranges, potatoes, rape, rye, rice, raisins, sorghum, saffron, plums and prunes, tobacco, vegetables, and wheat,—with forest products and pastures.

31. Barley is cultivated for brewing and cattle-feeding, chiefly in Champagne, Brittany, Flanders, and Artois.

Beetroot is a great industry, especially in Nord, Pas-de-Calais, Somme, Aisne, Oise, Seine-et-Oise, Seine-et-Marne, &c.

Chestnuts in Limousin, Auvergne, Cevennes, Cantal, Anjou, Provence, Dauphiné, Perigord, and Var.

Forests occupy about one-sixth of the surface, chiefly in the north-east, east, and Pyrenees, the Vosges, Ardennes, Argonne, Jura, Côte-d'Or, Morvan, Landes, &c.

Flax in Flanders, Artois, Normandy, Brittany, Maine, Anjou, and Gascony. That of the Lys valley, Bernay, Brittany, and Maine is much esteemed.

Hemp in Picardy, Champagne, Anjou, Maine, Burgundy, Brittany, Dauphiné, &c.

Maize in Gascony, Béarn, Burgundy, South Brittany, Berry, Bourbonnais, and generally throughout the third zone.

Mulberry in Gard, Drome, Ardèche, Vaucluse, Herault, Isère, Bouches du Rhône, Rhône, Aude, and Var, for silkworm rearing.

Oats are grown for horses in Maine, Champagne, Picardy, and Flanders.

Olives in the Mediterranean departments, Pyrénées Orientales, Corsica, &c., Marseilles being the chief centre.

Oranges in the extreme south.

Oleaginous plants mainly in the north, north-west, and east.

Rye principally in Morvan, Burgundy, Brittany, Aube, the Landes, and where the soil is poor and the country hilly.

Rice at Camargue, but the cultivation is almost extinct.

Pastures chiefly in Normandy and Brittany by the sea. There are many tracts of pasturage throughout France, raising flocks of sheep, whose wool rivals that of the merino.

Tobacco in some twenty departments; the best is grown at Tonneins.

Truffles in Vaucluse, Lot (Cahors), Basses Alpes, Dordogne (Perigord), Drôme, and Isère.

The **vine**, after cereals, ranks of the highest importance, and is cultivated throughout France, south of the line named in district two in the climatic division.

The vine covers nearly one-twenty-fifth of the surface, and appears in seventy-five departments, but three-quarters of the production comes from thirty of these. The districts where most land is under vine-cultivation are Gironde, Charente, Hérault, Dordogne, Gers, Gard, Lot et Garonne, and Var.

The principal vine and wine groups are *seven* in number:—

(a) The wines of Burgundy (Côte-d'Or); (b) of Champagne (river Marne); (c) of the south-east, or Bordelais, covering "clarets," of which Bordeaux is the centre; (d) of Charente, the brandy districts; (e) of the "Midi," Roussillon, Languedoc, Provence, of which Cette is the centre and outlet; (f) of the Rhône; (g) of the centre, Auvergne, Anjou, Saumur, &c.

Wheat is generally grown from north to south, central, and east to west. Dividing France into *seven* great agricultural divisions, namely, north-west, north-east, east, south, south-west, central, and west, we find—

N.W. is one of the richest and most fertile in France, and the best cultivated. This division embraces Flanders, Artois, Picardy, Isle of France, Normandy, Maine, Touraine, and Orleans, and yields apples, fruits, cider, saffron, wheat, and on the south borders flax, hemp, the vine, and pastures.

N.E., Champagne, with flax, hemp, forests and their products, pastures for sheep, and wool, tobacco, wine, and cereals.

E., Franche-Comté, Burgundy, Nivernais, Bourbonnais, Berry, Dauphiné, and Savoy, yielding colza, hemp, maize, wheat, the vine, wood,—pastures, and much waste land.

S., Provence, Languedoc, Roussillon, with cork wood, mulberry, madder, maize, olive, the vine, wheat, pastures, pistachionuts, chestnuts, and perfume flowers.

S.W., Bearn, Foix, Haut Languedoc, Gascony, Guyenne, Angoumois, Saintonge;—maize, wheat, the vine, pastures, truffles, wood and forest products from the Landes.

Central, Berry, Marche, Limousin, Auvergne, Lyonnais, with barley and other cereals, chestnuts, fruits, hemp, nuts, pears, pastures, maize, the vine, &c.

W., Brittany, Anjou, Poitou, and Aunis;—buckwheat, flax, fruits, hemp, rye, tobacco, wheat, &c. Poitou gives the best mules in Europe.

32. We have stated that as regards local trade movements France is as far advanced as any European State in facilities for transit of merchandise. **The rivers** are many and navigable, and are connected one with another, and also with other countries by a fine system of **canals**,—**international waterways**,—extending for some 2300 miles; the **sea-board** is very considerable, with excellent harbours, and the **railway systems**, from north to south, from east to west, and throughout the country, leave little to be desired.

The French railway centres, notably Paris, are the European starting-points for international traffic; through carriages run to every country except Scandinavia and Greece, but there is a change of gauge on the Spanish frontier. **The fine roads**, formed by the great Napoleon, are another means of conveyance from the remoter districts. Ease of transit to the outlets determines the "trade."

33. Turning to statistics, we find that in 1866 the population was about 38 millions, but that this number had decreased in 1872 to 36 millions, being equal to 179 to the square mile of area; of these about one-half were agriculturists.

For the five years from 1860 to 1864 the total imports averaged 92 millions annually, and the exports 96 millions sterling; in the following decade—1870 to 1874—these figures had risen very largely, to 135 millions and 136½ millions respectively. During the first period **Great Britain was interested in the exports** to the average extent of 21½ millions a year, and **supplied imports** to the value of 8 millions; in the following term the figures had risen to 40 millions exported to us, and 16 millions imported from us.

In 1874 the **staple exports** were butter (4 millions), barley (1 million), eggs (2 millions), leather manufactures and gloves (1½ millions), silk (2 millions), silk goods (8½ millions), brandy (1½ millions), sugars (4 millions), wines (2½ millions), and woollen goods (2½ millions); the **imports** were coal (1½ millions), cotton goods (3 millions), and woollen goods (3½ millions).

In 1886 the population had risen to 38½ millions, or 188 to the square mile in density; one-half being agricultural, one-fourth industrial, and one-twelfth commercial.

From 1881 to 1885 total trade had again risen considerably, the imports averaging yearly 400 millions, and the exports 308 millions. Of these figures, £181,000,000 and £133,250,000 represent *home* imports and exports; that is, commodities imported into France for consumption there, and exported goods derived from French soil or industry. Bullion movements are not included in these amounts.

Particularising, cereals decreased in export from 3½ millions in 1881 to 1½ millions in 1885, and also decreased in import from 20½ millions to 9½ millions during the same time. Wine was fairly stationary; exports were 10 millions in 1881 and 10½ millions in 1885, the imports being 14½ and 15½ millions respectively. The *average* yearly export of cereals for the five years 1881 to 1885 was 2½ millions, and the imports 16 millions; of wine, 9½ millions and 14½ millions respectively. In 1885 the export of silk and silk goods was valued at 8½ millions, besides 4½ millions of raw silk, and woollen fabrics valued at 13½ millions sterling.

Turning to English trade, we find that **our share of the exports** for the period 1880 to 1884 averaged 39½ millions annually, falling in 1885 to 35½ millions; of **imports** 16½, falling to 15 millions in 1885. These figures show a gradual but steady decline. Goods sent "in transit" in 1885 were valued at £8,000,000. The **staple exports** were silk goods (6 millions), woollen goods (5 millions), butter (2½ millions), wine (2½ millions), leather goods (1 million), eggs (1½ millions),

brandy ($1\frac{1}{4}$ millions), and sugar, which on the average of years was valued at $1\frac{1}{4}$ millions, fell in 1885 to half a million. The chief imports were woollen manufactures (3 millions), cotton goods ($1\frac{1}{2}$ millions), coal ($1\frac{1}{4}$ millions), iron, &c. (1 million). It is stated that, out of an area of 123,500,000 acres, France had in 1885 37 millions under cereals, and 5 millions under the vine.

34. We are thus able to review the movements of trade and population for these fifteen years; we see that the population *increased* only about eight per cent., bringing the number to somewhere about the same as it was before the war. We trace that *there has been an enormous rise in French trade*; from 1860-64 to 1870-74 the total imports and exports *increased 45 per cent.*, and from the latter date to 1880-85 the *increase for home imports only was a further 35 per cent.* or thereabouts.

If the figures for 1870-74 represent the total turnover, both general and special, exclusive of bullion, the rise from 1870-74 to 1880-84 was nearly 200 per cent. on imports and quite 125 per cent. on exports.

In the 1870-74 period England held about 30 per cent. of the *exports* and 11 per cent. of the *imports*. The amounts represent *a rise of cent. per cent.* on imports and *about 90 per cent.* on exports over the previous decade.

In the 1880-84 period, of home production and home consumption, England held about 9 per cent. of the imports and 29 per cent. of exports. In other words, *our trade barely held its own on the lines of 1870-74*, without reference to the large increase in total French trade or population; while in the year 1885 the fall continued, relapsing 10 per cent. from the average of 1880-84 on exports, and 12 per cent. from import averages.

Of staple exports, between 1870-74 and 1880-84, silk and silk goods *fell* nearly 50 per cent.; 1885 showing a still further decline. Eggs also *relapsed* considerably; leather was *stationary*; brandy *declined* 14 per cent.; sugar *fell*

enormously, about 75 per cent. on the averages, while 1885 *declined* a further 60 per cent. from the average of the four preceding years; wine *did not alter*, but woollen goods showed nearly a *cent. per cent. rise* in the decade.

With regard to imports from England, coal remained *stationary*; cotton goods *fell* nearly 50 per cent., and woollens 20 per cent.; goods in 1885 showed badly as compared with the preceding averages.

35. Thus the tendency of our trade with France *seems downwards*, a gradual and steady fall having taken place during later years, and yet France has and maintains one of the largest "turnovers" in Europe. The tendency with the French is to manufacture for themselves, and this operates against France buying our manufactures, the iron and textile centres in France rivalling our own centres of work and production. The system of bounties on home-grown beet-sugar militates, at the cost of the community of consumers, against the introduction of British colonial cane-sugar, and so far depreciates our interchange with France. *A noteworthy item is the rise in the French export of woollen goods to England, while our own exports of the same commodity to France fell away 20 per cent.* The economic inference is, that our neighbours have so much advanced in their home manufacture as to be not only better able to supply their own wants, but also to spare from their surplus more for us; and that, conversely, our trade has retrograded. From 1870-1884 we lost 1 per cent. on exports and 2 per cent. on imports, while in 1885 our proportion stood about 3 per cent. and 1 per cent., respectively, lower. All our manufactures have been more and more discarded, while France is sending us woollen goods in increasing quantities; the advance between 1870 and 1885 reaching no less than 100 per cent. French imports of woollens, which we formerly held entirely, have been diverted to other manufacturing States, which implies that we have allowed other nations to beat us in meeting French wants.

Examination Questions on France.

1. Wherein does the course of the foreign trade of France differ from that of Germany ?
2. Name the French ports according to their importance ; the regions whence merchandise gravitates to them ; the nature of this merchandise, and of the imports received from abroad.
3. Describe the five climatic or floral zones of France, with their characteristic produce.
4. Where are the chief sites of the French textile industries ? In what do these industries excel ? To what English manufacturing towns do they correspond, and in what local respects do they differ ?
5. State generally the character and the value of the reciprocal trade between France and England.
6. Give an account of the means of communication in France, by river, canal, and railway, with their junctions and connections.

SPAIN

Geographical position, 1—Geographical features, 1, 2, 4, 5—Natural divisions of the country and river-flow, 3-3g—Connections between these divisions introduced by art, 5, 6—Malte Brun on the people of Spain, 7, 9—**External trade, 8—Commercial activity, 8, 10—**Divisions of labour, 10; agriculture, 11; mining, 12; manufactures, 13—*Ebb and flow to natural centres*, with circulation of merchandise, 11-13—Centres of distribution, 11-17—*Characteristics of Spanish trade*, 18, 19—M. Bainier on the coal, 20, mining, 21, and textile industries, 22, of Spain—**Natural division of trade, 23—Mineral resources, 12, 24—**Localisation of the principal metals and minerals, 12, 25—**Agricultural divisions, 11, 26—Agricultural resources, 11, 26—**Localisation of the chief agricultural produce, 11, 27—Means of intercommunication, 5, 6, 28—**Trade statistics, 29—**Review of the movements of trade and population from 1873-84, 30—**Examination Questions, p. 84.**

1. Spain is a country with a fine sea-board of about 1750 miles; the *north* and *north-west* facing the Bay of Biscay and the Atlantic, the *south* and *east* facing the Atlantic and Mediterranean; while the *north-east* and *west* exhibit international land frontiers, that on the former being both the political and natural boundary presented by the **Pyrenees**, separating Spain from France, and only passable at the extreme ends near the sea; that on the west being the *political* boundary between Spain and Portugal.

2. The mountain-ranges indicate the presence of mineral wealth in abundance, but little attention is paid to mining, except in the **Asturian Mountains**, the **Sierra Nevada**, and the celebrated quicksilver-mines of **Almaden**, although Spain is said to be the most metalliferous country in Europe.

The high lands are generally dry and sterile, covered with

short herbage and broom—the “runs” for the Merino sheep. The valleys and lowland plains are fertile, and more thickly populated. The region of the greatest heat and luxuriance is that along the Mediterranean shore, the vegetation being almost tropical, and here more activity exists than in any other part of the kingdom.

3. *The map exhibits a succession of gravitation regions from north to south.*

a. That bounded south by the Asturian Mountains, which extend some thirty-five miles distant from the sea, due east and west, joining the Pyrenees on the east. Here the natural gravitation is from the mountains to the sea. There are in this district, too, several rivers running into “the Bay,” which materially assist transport.

b. Region two extends from these mountains to the Castilian range, running from the Portuguese frontier, and curving northwards to the Asturian range near Reynosa. The area thus enclosed, Leon and Old Castile, has a natural gravitation to the sea *viâ* Portugal, the river Douro and its branches giving floatage facilities throughout this district.

c. The third region is between the Castilian Mountains and those of Toledo, which run from Portugal and join the Castilian range just where they trend northwards. This district also gravitates to the Atlantic *viâ* Portugal, being watered by the Tagus and its branches.

d. The fourth region lies between the mountains of Toledo and the Sierra Morena, which runs in exactly the same way, giving a natural course *viâ* Badajos, then southwards along the confines of Portugal to the sea, being watered by the Guadiana.

e. The fifth region is enclosed by the Sierra Morena and Sierra Nevada, gravitation being westward, as before, with outlet at Cadiz, and watered by the Guadalquivir.

f. The sixth region is included between the Sierra Nevada and the southern sea, with natural gravitation to the Mediterranean.

g. The seventh and last region is all East Spain included

between the mountains running north and south, and uniting all the previous chains and the Pyrenees. This district is watered by the Ebro, its affluents, and many smaller rivers.

4. The rivers, except for some amount of floatage, are not of much importance either for commerce or irrigation, being deficient of water for a great part of the year, and running through deep ravines. Those flowing to the west have their lower courses and best waters in Portugal, but are allowed, from neglect, to silt up.

5. These seven regions represent a country rising in steps and falling from the centre on three sides like a pyramid. In all cases these mountain-chains form natural barriers, and until railways crossed the ranges by gradients or tunnels, the only means of effecting interchange was by roads, which in Spain were, and are, but mere tracks. Now each enclosed region has its system of railway lines, which communicates with the other districts, but generally only in one place.

6. Thus *regions one and two join at two points, Reynosa and Vevalamo; districts two and three unite at one point, Avila-el-Escorial; districts three and four at one point, Villacana; regions four and five at two points, El Visillo and Belmez; regions five and six at one point, Alora. Districts one, two, three, and four unite with seven in one point in each instance, Alsasua, Burgos, Calatayud, and Albacete*, thus showing that the distributing area of Spain is enlarged, but still somewhat restricted.

7. These several regions are peopled by a race "presenting shades of character perhaps more decided than those of the other States of Europe, because the neglect of industry, the difficulty of communication, and the natural barriers which separate the inhabitants are so many obstacles to those manifold relations which have the effect of giving a uniform tint to the people of a State."

8. The position of Spain for external commerce can be seen to be excellent. From the northern ports she holds direct communication with France, Great Britain, and North Europe; on the west there is a free and uninterrupted access

to **America** ; **Africa** lies close to ; and the **Mediterranean** gives direct communication with the East. The international railway lines link Spain with France and Portugal, *although a change of gauge on the French frontier necessitates "breaking bulk."* With all her physical advantages and earth-gifts, Spain has sunk to a low rank among trading nations.

9. Malte Brun says that "Spain is one of the European countries where the education of the people has made the least progress. The true causes of the inferiority of Spain are the disastrous wars of the seventeenth century ; the vast extent of her ancient colonies, which absorbed all the vital force of the nation ; the condition of ignorant superstition, which has estranged her from all modern progress ; the bad system of property, which is held in few hands ; and the political agitations which have troubled the peninsula."

10. With such an account, we are not surprised to find that the tending of sheep is the chief occupation of the *central regions*, agriculture of the *south and intermediate districts*, while industries proper are confined solely to the *first and seventh regions*.

11. **Agricultural work** comprises the cultivation of the vine in Andalusia, yielding the celebrated "**sherry**" wine, which *gravitates to Cadiz* ; the sweet wines of the *sixth region*, *gravitating to Malaga* ; and the **Valencia** and **Tarragona** wines of the seventh region. **Esparto grass**, which is indigenous in the south, is used for papermaking ; wheat-cultivation in Central Castile, with olives, oranges, and other fruit "**gardens**" in the southern parts ; saffron, dye-plants, legumes, and cork in Murcia, Aragon, Granada, &c.

12. **Mining industries** centre in region one, where iron is largely worked, gravitating to **Bilbao** and **Santander**. Quick-silver at **Almaden**, and lead ore in the south and south-west gravitating to **Huelva** and **Carthagen**a. Much of this industry is carried on by the aid of foreign capital ; in general the raw material is exported, the working-up of minerals in Spain not ranking as a business.

13. Textile industries are entirely centred in district seven, and gravitate to Barcelona and Valencia.

The rest of Spain is practically devoid of industrial life.

14. We thus find region one with a great distributing centre in Bilbao, and minor circles in Santander, Gijon for Oviedo circle, and the coal of Langrès; Coruna for Lugo; and Vigo.

15. Region five has an important entrepôt and distributing centre in Cadiz, followed by Seville, Huelva, Granada, and Cordova, the latter place now increased in importance by the crossing railway lines.

16. Region six has two great centres in Malaga and Almeria; while district seven, the most important of all, has Barcelona, followed by Tarragona, Valencia, Alicante, and Carthagena (Porman), with Cuença as a fairly large wool market.

17. The central districts filter through to the south. There are a few inland emporiums, but they are of little importance commercially; Madrid, Ciudad Real, Granada, Albacete, Zaragoza, Burgos, Pampeluna, Palencia, Oviedo, and Leon among others.

The southern districts grow some little cotton, but Barcelona generally draws its requirements from America.

18. Spain is a customer of and supplier to Great Britain, not a competitor; the textile manufactures being chiefly used for home consumption and for the South American markets.

19. *The want of extended means of transit and the character of the people cause the main features of Spanish trade to be raw produce on their side, met by manufactures, coal, and iron on the side of England; gravitating in each case to one of the ports already named.*

20. There is evidence that this country possesses rich coal; but, as M. Bainier points out, there is but a feeble demand for this fuel, since the climate enables the people to dispense with it in their households, and factories or manufacturing industries requiring coal as a motive-power are conspicuous by their absence. Thus the divisions of industry act and react on each other.

21. Regarding **mining work** generally, scarcely an impression can be said to have been made upon the surpassing resources of the country. The fatal want of industrial energy prevents the difficulties of distance from the sea, the wretched roads, and scarcity of fuel from being overcome.

22. The same authority gives similar evidences of the backward state of the **textile industries**, inferior to those of any other country in Europe. The high price of coal, difficulty of transit, and scarcity of capital are a bar to advancement, which has been still more hindered by ages of political agitation. These drawbacks to Spanish prosperity are due to the character of a passive race. Nature has done everything for the country and people, but the lack of native enterprise mars her beneficent work. So far as Spain produces textile fabrics, she works the cottons of the United States, Brazil, and the Levant, and the goods are destined either for home consumption or the colonies.

23. Spain, like France, shares in the commercial activity of three trade-areas. *The northern area covers the "ore" and "general trades;" the central, the intermediate zone; the southern, the Mediterranean trade.* The area of Spain is rather under 200,000 square miles, only about 34 per cent. of the surface being cultivated.

24. The extreme north and south, which cover the circles of the ore-trade, are the only parts of the country where the Spaniards utilise their **mineral treasures**. These consist of antimony, alabaster, arsenic, alum, blende, barilla, coal, copper, calamine, cobalt, graphite, gypsum, gold, galena, iron, jasper, jet, kaolin, lignite, (lead), limestone, mercury, manganese, marble, platinum, silver, sulphur, soda, slate, salt, sandstone, tin, and zinc, with saltpetre, phosphatic nodules, asphalte, special salts (Epsom, &c.).

25. Coal is mined in Asturias, Leon, Estremadura, Andalusia, Castile, and Catalonia. Gijon is the outlet port for the Langrès mines of Asturias.

Copper is shipped at Seville and Huelva from the celebrated

Tharsis and Rio Tinto mines. The metal is so extensively worked as to make this district an important circle of the ore-trade.

Iron in Galicia, Asturias, Biscay (Somorrostro), New Castile (Ciudad Real, Toledo), and Andalusia (Marbella). The ores of Asturias, Biscay, and Galicia are excellent for the "Bessemer process," and are so extensively shipped as to make the "Bilbao" trade a recognised expression in commercial circles. Marbella exports its own ore, and Huelva iron pyrites.

Lead forms in Murcia and Andalusia another ore-trade circle, of which Porman and Carthagena are the leading outlets; it is mined at Malaga, Jaen, Carthagena, Almazarron, Almeria, &c.

Manganese in Galicia, Asturias, and Andalusia (Huelva).

Quicksilver from the celebrated mines of Almaden on the borders of New Castile; also at Oviedo and Guadalaxara.

Salt at Cardona in Catalonia, San Fernando, Torrevieja, Alicante, Cadiz, &c., whence a large export trade is carried on with Newfoundland, &c.

Zinc (calamine and blende) in Biscay—Santander being the outlet; also in Murcia and at Almeria.

26. Spain touches the *region of palms and cotton*, and advances through the *olive and vine zones* to the northern shores, where *apples and orchard fruits* thrive; and is divided into four agricultural regions:—(a.) The region of the Ebro (Catalonia, Aragon, and Navarra). (b.) Region of the Pyrenees and extended mountains (Galicia, Asturias, and Biscay). (c.) Region of the Castillon plateau (Leon, the Castiles, Manche, and Estremadura). (d.) Region of the Mediterranean (Andalusia, Granada, Murcia, and Valencia).

The characteristic agricultural products of region (a.) are barley, fruits, hemp, olives, the vine, and wheat,—fine pastures, and forest trees in the valleys. (b.) Apples and orchard fruit, maize, shipbuilding wood, wheat,—excellent pastures. (c.) Fruits, silk, wheat, &c.; but the chief industry is sheep and

cattle rearing on the pastures. (d.) Barley, clover, fruits—date, citron, orange, fig, raisin, &c.—hay, hemp, cochineal, maize, olive-oil, palm, rice, silk, the vine, wheat, &c.

Taking Spain generally, the dry lands are favourable for good wheat-growing, and the irrigated parts for fruits.

Agricultural products comprise apricots, almonds, anise, banana in the south, barley, chestnuts, cotton, coffee, carob-bean, caper, citron, cork, date-palm in the south, forest wood, esparto, figs, flax, hemp, indigo, liquorice, mulberry, maize, millet, madder, oats, potatoes, pulse, pistachio and other nuts, pine-apple, rye, raisins, sugar-cane, silk, saffron, olive and olive-oil, oranges, tobacco, the vine, woad, wheat, walnuts, &c. Pastures are plentiful.

27. **Barley and maize** are cultivated generally.

Cotton round Motril, and in Catalonia for the manufactures of Barcelona.

Coffee and indigo in south and South Central Spain.

Esparto, in Andalusia, Alicante, Murcia, Almeria, and Valencia, grows spontaneously, and is shipped in bales from the Mediterranean ports of these provinces.

Fruits and nuts from the Mediterranean sea-board.

Légumes are a staple food and universally cultivated, leaving a surplus for export.

Olives and oil along the Mediterranean shores ; the oils of Oléa are specially famous. Andalusia, Murcia, Valencia, and Catalonia also cultivate the olive.

Pastures are excellent, and nourish the well-known *merino* sheep ; they are nearly universal, but the finest are in Central Spain.

Rice in Valencia and the delta of the Ebro.

Silk : the chief centres are Valencia and Jaen, but Murcia, Andalusia, Aragon, &c., also yield this product.

The **vine** is generally grown, the centres of production being Catalonia, Aragon, Navarra, Valencia, Andalusia, Murcia, &c. The wines of Cadiz (*sherry*), are well known ; Jerez de la Frontera yields the finest quality of sherry ; other brands are

Manzanilla (San Lucar), and *Montilla* (Cordoba). A quantity of Spanish wine is shipped to South America. Raisins and grapes are also largely exported from Valencia, Malaga, and adjacent ports.

Wheat is very generally grown, that round Seville being of excellent quality.

28. Local Trade Movements.—Communication from inland to the coast is bad, and the transit of merchandise is yet confined in large measure to *the roads*, which have been characterised as bad in quality and often absolutely unsafe; *the canals* are but few; *the rivers*, where navigable, are used to some extent, and might be easily and greatly improved by dredging. The *great international lines of railway* run through Central Spain, but difficulties of transit paralyse trade, except on the coast and around the centres of production.

Goods sent "south about" constitute the "**Mediterranean trade**," and those sent north or *viâ* Portugal, the "**general trade**."

29. Taking a view of the trade and population of Spain from 1870 to 1874, we find that in 1873 the *people* numbered slightly over $16\frac{1}{2}$ millions, equal to ninety-four to the square mile in density. The **total imports** averaged 19 millions annually, and **exports** 12 millions—the figures for the single year 1874 being $15\frac{1}{4}$ and $16\frac{1}{8}$ respectively. France imported the most, while the United Kingdom received the largest exports. During this period **Great Britain** received of the above **exports** $8\frac{1}{2}$ millions, and supplied $3\frac{1}{2}$ millions of the **imports**.

The **staple exports** in 1874 were wine ($2\frac{1}{2}$ millions), fruits ($1\frac{1}{2}$ millions), lead ($1\frac{1}{4}$ millions), iron ore (five-eighths of a million), esparto (half a million), and olive-oil (£300,000). The **imports** were linen yarn and linen (£700,000), iron (£750,000), and coal (just over half a million).

In 1884 the **population** had barely increased to 17 millions; the **total yearly imports** had risen to $30\frac{3}{4}$ millions, and the **exports** to $27\frac{3}{8}$ millions. **Great Britain** received of the

exports 11 millions— $9\frac{1}{2}$ millions in 1885—and contributed $3\frac{3}{4}$ millions to the imports— $3\frac{1}{4}$ millions in 1885.

The total value of the wine export in the 1880 to 1884 period was $57\frac{1}{2}$ millions, as compared with $15\frac{1}{8}$ from 1855 to 1859.

The staple exports to Great Britain in 1885 were wine (£1,000,000), fruits ($1\frac{7}{8}$ millions), iron ore ($1\frac{3}{4}$ millions), lead (£850,000), pyrites and ore (2 millions). The imports were linen (£300,000), iron (£350,000), coal (£650,000), machinery (£500,000), and cotton (less than £200,000). Authorities state that 80 per cent. of the soil is productive, but only 34 per cent. is cultivated, 4 per cent. being under the vine.

30. Examining these figures, we are able to draw conclusions as to the movements of trade and population from 1870 to 1884. We note that the population only *increased* about 100,000, or say .6 per cent. The total imports *rose* about 61 per cent., and exports 102.5 per cent. *In 1870-74 period Great Britain held quite 16 per cent. of the imports and 75 per cent. of the exports; to preserve the same ratio the figures for 1880-84 should have been £5,000,000 imports and £21,000,000 exports; in reality they were £3,630,000 and £11,000,000, showing therefore a very serious decline.*

The wine export average went back some 50 per cent.; fruits were *practically stationary*; while iron ore *increased* 133 per cent., but lead *fell* about 33 per cent.

Turning to imports, linen *fell* quite 50 per cent., and so did iron; but coal *increased* 20 per cent.

In 1880-84 period Great Britain held about 39 per cent. of the exports instead of 75 per cent., and 10 per cent. instead of 16 per cent. of imports.

Although Spanish trade increased largely as a whole, it will be seen that our intercourse has not kept in step. Brazil and La Plata are becoming large purchasers of Spanish wine. We ourselves buy much more of the Spaniards than we sell to them.

There is every indication of a large rise in Spanish trade as transit facilities increase. We note, then, that Spanish trade from 1870-1885 *increased* in imports 61 per cent., and exports 102·5 per cent. ; but England, during the same period, *lost* 36 per cent. on exports and 6 per cent. on imports.

The purchases of ore raising the value of the export 133 per cent. may partly be accounted for by the amount of British capital invested in the mines. If Spain reduces the present heavy charges on shipping, increases her railways, and frees the mouths of her rivers, a magnificent future is open to her. She is, however, still heavily handicapped by high protective duties.

Happily Spain appears at length to be awakening to active enterprise, which, if assured by the continuance of peace and the enlightened policy of her rulers, will be the opening of a new market to the commercial world.

PORTUGAL.

Geographical position, 1, 3—Geographical features, 2, 4-7—Geographical relation to Spain, 3; railways, 4—Physical features in relation to industries, 7—Agricultural and mining capabilities, 5, 9, 16—Hindrances to commerce, 5, 7—Natural divisions of the country and river-flow, 6—Commercial activity, 5—The Portuguese, 8, 9—*Characteristics of Portuguese trade*, 8-10; specialties, 10—Centres of distribution, 11, 11a; Lisbon, 11; inland centres, 11a—*Natural division of trade*, 12—*Mineral resources*, 5, 9, 13—Localisation of the principal metals and minerals, 14—*Agricultural produce*, 5, 9, 15—Localisation of the chief agricultural products, 16—*Fisheries*, 9, 17—*Means of intercommunication*, 4, 18—*Trade statistics*, 19—*Review of the movements of trade and population from 1868 to 1885*, 20—*Examination Questions*, p. 84.

1. Portugal is a country admirably situated at the south-west extremity of Europe, on the road to West Africa and South America, and standing for maritime commerce inferior to none; but at present she is apparently unable fully to utilise her position. She is bounded by the sea on two coasts, and has on her land-sides Spain as a frontier neighbour.

2. Her coast-line, which extends some 500 miles, commands the Atlantic and leads directly to the Mediterranean; the harbours are sufficiently abundant, but difficult of access by reason of the sandbars which stretch across their entrances; but these deterrents might be removed.

3. Portugal has a land frontier north and east equivalent to her sea-coast, but the commercial interchange between Spain and Portugal is insignificant. West Spain and Portugal comprise one natural area and gravitation region.

4. The rivers, which drain all Central Spain, excepting only the Ebro and Guadalquivir, traverse Portuguese territory, but

the sand is allowed to accumulate in their beds ; yet no country, in proportion to its area, is better supplied with waterways. **Railways** have been introduced, and connect Portugal internationally with the rest of Europe.

5. The soil is generally fertile, but *husbandry* far from advanced, while the *metal* and *mineral industries* are depressed by the want of roads and means of conveyance.

6. The natural divisions for the gravitation of merchandise are *four* ; first, the river **Minho**, which acts as the boundary between Galicia and Portugal ; then in the north, from the hills of Galicia in Spain to the Sierra d'Estrella in Mid-Portugal, the country gravitates to the river Douro, and the seaport of Oporto as a distributing centre. From the Sierra d'Estrella to the Alemtejo Mountains the gravitation is to the Tagus, with Lisbon as chief centre ; from these mountains to the frontier, including Algarve, the gravitation is to the Guadiana, with only secondary places as centres, such as Villa Real, Tariva, and Faro.

7. Although the mountain districts give evidence of mineral wealth, and Algarve can grow almost tropical products ; although Lisbon, the nearest Continental port to the New World, could receive cargoes of cotton and other fibres, no industries, excepting that of salt, exist to compare with those of other Western European nations.

8. The Portuguese allow their trade to fall into the hands of "outsiders ;" yet Portugal "first ventured to launch ships towards the unknown regions of the Atlantic and to inaugurate the greatest maritime expeditions."

9. This disinclination for commerce may have originated in apathy, but it has resulted in a deficiency of capital, and, as a consequence, the population is drafted into agricultural and fishery pursuits.

10. The only specialties of real value in Portuguese trade are the port wines of the Douro and Tagus valleys, the salt of Setubal, the cork-wood of the centre, and the fisheries of the coasts.

11. Throughout this sea-board there are only two distributing circles of importance,—those of Oporto and Lisbon; and of these, the first is debarred from taking a very prominent position owing to the difficulty of approach from the sea. Lisbon, therefore, stands as the centre of Portuguese commerce by its position on the Tagus, and as the terminus of the international railway lines running from Paris and Madrid.

11a. Inland centres are unimportant, as manufactures in every branch are reduced to a minimum; each family, more or less, supplying by its own industry articles of primary necessity. Braganza, Viseu, Santarem, Evora, Elvas, and Beja might be mentioned; but, as compared with the towns in other countries, they cannot come within the category of places of distribution, which must here be confined to the seaports.

12. Portugal belongs to the “general trade” and to the vine and olive region of the warm temperate zone, extending in the south to the palms of the sub-tropical zone.

13. Mineral resources consist of antimony, bismuth, cobalt, coal, copper, iron, kaolin, lead, lithographic stones, millstones, manganese, slate, and salt.

14. Coal occurs in Beira province (Buarcos and San Pedro de Cordova).

Copper in Algarve (San Domingo).

Iron in Leira,—vast deposits not yet worked.

Lead in Beira (Aveiro).

Manganese in Alemtejo province.

Salt at the mouth of the Tagus and the marshes of Aveiro, Faro, Figueira, Viana, Setubal, &c. This is the only mineral actively worked; Setubal is the most important centre.

15. The chief agricultural products are the cork, date, and other fruits, flax, madder, maize, oats, olive, rice, rye, the vine, and wheat, with the fig, orange, myrtle, palm, &c., in the south (Algarve). Much of the soil is yet uncultivated in too many places.

16. Cereals are chiefly grown in Entre Minho e Douro,

Tras-os-Montes, and Beira, maize mainly in the first two, and rye in the last.

Forests, on the mountains, consisting of oak, cork, and hardwood trees, in the north; chestnuts, central; and date, agave, &c., in the south.

Olives specially round Santarem and Oporto, also in Algarve, which province likewise produces lemons, mulberry, orange, &c.

Rice in Beira, Alemtejo, Estremadura, and Algarve.

Vines, yielding the "port" wine of Oporto and Lisbon, are the best in the districts around Oporto, then Coimbra, Estremadura, Algarve (white wine), and Torres-Vedras (red).

17. The sardine-fishery is important.

18. Local trade movements are either by sea or rail. Lisbon is now the terminus of a new through international mail service from Paris and London; the rivers, being silted up, as before stated, and choked with sand, do not assist in the movements of goods. The new mail route makes Lisbon an important centre for the *speedy* transit of international goods, although the break in the uniformity of gauge on the Franco-Spanish border is a detriment and hindrance.

19. Statistics show us that in 1868 the population was about 4 millions, equivalent to 109 to the square mile. No total returns are available for the period 1870 to 1874, but, from data, the annual imports may be estimated at 4 millions, and the exports at $7\frac{1}{2}$ millions, or thereabouts. During this period, Portugal supplied goods to Great Britain valued at 4 millions yearly, and took from us an average of $2\frac{3}{4}$ millions. The staple export at this time was wine ($1\frac{1}{2}$ millions); the imports were cotton goods (1 million), iron (£400,000), and woollen fabrics (£170,000).

In 1881 the population had risen to about $4\frac{3}{4}$ millions; the total imports averaged (1880 to 1884) $7\frac{1}{2}$ millions per annum, and the exports 5 millions; of these, Great Britain contributed 2 millions of the imports, and received $3\frac{1}{4}$ millions of the exports; the staples being wine (£1,000,000), oxen (£200,000), copper and regulus (£300,000), cork (£350,000),

fruits (£150,000), and pyrites (£50,000); while the imports were cotton goods (just over half a million), iron (£200,000), woollens (£100,000), and butter (£125,000).

20. From this view of the movements of trade we learn that the population *increased* about one-sixth. Total imports *rose* quite 75 per cent., but the exports *declined* 33 per cent. *England, during the first term, was interested in both imports and exports to the extent of about one-half; and in the following period we barely retained the same share.*

The staple, "wine," fell a trifle, counterbalanced by a larger export of minerals, fruit, and cork in the second term of years.

Portuguese trade is stagnant, with no immediate prospect of a rise, our dealings with this country having been nearly stationary for years. No effort is made to improve the coast approaches or the rivers; and while Portugal depends solely upon her agriculture, and does not attempt to act vigorously and intelligently in foreign interchange, her commerce must languish.

Examination Questions on the Iberian Peninsula.

1. Delineate the seven "gravitating regions" into which the Iberian Peninsula is naturally divided by its mountain system, with their rivers; and state how far these rivers are utilised for commercial purposes.
2. What inferences may be drawn, from the geological formations, of the mineral resources of this area?
3. Describe the geographical position of the peninsula for successful commercial enterprise. To what trade-areas does it belong? and to what causes can be attributed the backward condition of the people?
4. Give the specialties, whether "earth-gifts" or industrial products, of Spain and Portugal respectively.
5. Name the ports of the two kingdoms, noting those engaged in the "ore-trade."
6. Generalise the commercial relations between these countries and the United Kingdom.

ITALY.

Geographical position, 1, 2—**Natural divisions of the country**, 3—**Artificial aids to Italian commerce**, 4—**Commercial position**, 2, 5—**Climate of Italy in relation to industries**, 6, 7; contrasts with other European countries—**Character of the inhabitants**, 6*b*; influenced by climate, 6*a*; quotations from authorities, 6*b*—**Commercial activity**, 7, 14—**Physical features and conditions in relation to industries**, 7, 8—**Geographical features**, 3, 5, 8, 9—**Location of the textile industries**, with centres, 10; mining, 11; agriculture, 12; food industries, 12; fishing, 13, 26—**Sources of supply**, 14—**Characteristics of Italian trade**, 15, 18; Italian transit-trade, 19—*Ebb and flow to natural centres*, with circulation of goods, 3, 16, 19—**Railways**, 4, 5, 17; and centres, 17—**M. Bainier on entrepôts**, 20; Turin, 20; Genoa, 20*a*; Leghorn, 20*b*; Civita Vecchia, 20*c*; Naples, 20*d*; Venice, 20*e*; Ancona, 20*f*—**Natural division of trade**, 21—**Mineral resources**, 22—**Localisation of the principal metals and minerals**, 23—**Agricultural divisions of Italy**, 24—**Localisation of the chief agricultural produce**, 25—**Means of intercommunication**, 4, 5, 27—**Trade statistics**, 28—**Review of the movements of trade and population from 1871 to 1884**, 29—**Examination questions**, p. 100.

1. The map of Italy shows a peninsula running in a southerly direction, washed on the *west* by the waters of the Mediterranean, and on the *east* by those of the Adriatic.

2. The land frontiers of Italy are not very extensive; but in the *north*, circling from west to east, she is in direct touch with France, with Switzerland, thence with Central Europe and with Austro-Hungary. Her position, therefore, for commerce both by land and sea is excellent.

3. Enclosed north and west by the High Alps, which extend along the shores of Liguria and merge into the Apennines, the country is naturally divided into three areas: (a) Piedmont, Lombardy, Venetia, and Emilia, with natural gravitation to the Adriatic, and watered by the Po and its tributaries;

(b) the western side of the Apennines, including the shores of the Gulf of Genoa; and (c) the eastern side of the Apennines. To these we may add the strip of land girdling the Gulf of Taranto from the hills to the sea.

4. Man has here, by the introduction of *railways*, broken through apparently insuperable barriers, and enabled communication to be maintained with adjacent wealthy nations: first, *by a sea coast-line* joining Italy to South France; secondly, *by piercing the Alps* at Mont Cenis, uniting Italy with Central and Northern France; thirdly, *by tunnelling* the St. Gothard, joining Italy to Switzerland, Central and North Europe; fourthly, *by the Adige valley and Innsbruck Pass*, joining the Tyrol, Austro-Hungary, and South Germany; and lastly, *by the Vienna-Trieste and Venice line*, which is laid over the lower arms of the Carnic and Julian Alps.

5. Thus for commerce no country is better situated; with a coast-line of some two thousand miles, close to Africa *over-sea*, and with an open highway by the Mediterranean, which gives uninterrupted communication both with east and west; while *overland*, a few hours by direct line connect the Italian centres with Paris, Marseilles, Berne, Berlin, and Vienna, and thus with all Europe.

6. Italy is favoured with degrees of climate which react upon her agricultural produce and her industries. The *north* is similar to the temperate European regions, with cold winters and warm summers; the *central parts* are generally warm and sunny, and the *south* is almost tropical.

a. These climatic conditions are reflected in the character of the people, those of the *north* being imbued with qualities that make the intelligent husbandman; in the *centre* the inhabitants are fitted for industrial occupations and farming; while the *southerner* has an ardent character, which is somewhat at variance with the indolence usual in warm climes.

b. Were the moral conditions as favourable as the material ones, no European country could vie with Italy in the variety, number, and excellence of her products; but

generally speaking, and especially towards the south, *nature is left to herself*. An eminent authority states: "Notwithstanding the fertility of the soil and the unrivalled climate of Italy, there is scarcely a country in Europe that does not leave it behind in everything connected with successful husbandry." Another recent writer says: "Both as regards agriculture and industry there are two regions, the north and the south, of which the south owes its immense riches much more to *nature* than to man; whilst the north is not only blessed by nature, but owing to the *industry* and *enterprise* of its inhabitants is much more flourishing than the south."

7. With these remarks before us, *we should look for industrial work* in all its phases *in the north and central districts*, with fitful *agriculture in the south*.

8. The geological formation of the mountain-ranges indicates *mineral wealth*; consequently some of the inhabitants are drawn to *mining* and the industries arising therefrom. **The plain of Lombardy**, once the garden of Europe, watered by the Po and its network of irrigating canals, is still a great centre of *agricultural activity*. **The eastern side of the Apennines**, consisting of limestone, yields a poor soil, and is barren in comparison with **the western side**, which is covered with a "volcanic" soil, than which none is more fertile.

9. **The rivers**, except the Po, are necessarily short, and partake more of the character of mountain streams; and yet, winding in and out among the lateral valleys of the Apennines, their length is greatly extended, increasing the power of interchange. Though impetuous in their current, they are yet not of sufficient force to carry out to sea the detritus gathered in their channels, which therefore accumulates at the river-mouths and spreads in pestilential marshes. Some of these have been removed by skilful drainage and converted into fertile and salubrious tracts.

10. **The textile industries** of Italy, chiefly carried on in Piedmont, Lombardy, and Tuscany, consist of *cottons*, **Turin**, **Milan**, **Biella**, **Pisa**, &c., being *centres* of this industry; *woollens*,

with Biella as a *centre*; silk in Piedmont, Liguria, and Lombardy, with Milan and Como as *centres*; and linen, with a *centre* in Bergamo.

11. The mineral industries all centre in the north—Tuscany and Lombardy.

12. Agriculture and food industries, such as wine, macaroni, &c., prevail in the south.

13. The shores attract a large population for the valuable fisheries; amongst them, of the tunny or giant mackerel, for oil.

14. Cotton is home-grown—in Southern Italy—in Lecco, Salerno, Calabria, and the Sicilian and Sardinian valleys. An herbaceous cotton, white and red, is indigenous, but Siam, Turkish, American, and Egyptian cotton-plants are introduced; and this industry is probably destined to increase as more attention is given to the cultivation of the fibre. What deficiency is required to be made up is drawn from America.

Hemp and flax are an especial growth in North Italy, and support the linen manufactures of these provinces.

Silk is in universal cultivation, and supplies the wants of the towns. Other raw materials for these manufactures, or any deficiencies, are supplied from French, English, or Austrian entrepôts.

15. Among commercial States Italy stands as supplying her own population with the necessities of life. She is a customer of and supplier to England, but at present is not a competitor in foreign markets, though England meets competitors in Italian markets.

16. What do we find to be the natural ebb and flow of goods? Genoa is the great distributing centre of Italy, and to it all the merchandise to and from the northern provinces gravitates. Tuscany has its *centre* in Leghorn; West Umbria and the Roman States have Civita Vecchia; Campania has Naples and Salerno; and Calabria West has Reggio. The shores of the Gulf of Taranto *gravitate* to Taranto; Apulia to Brindisi, Bari, and Barletta; Emilia and all the northern provinces to Ancona for Eastern distribution, or to Venice for general European.

17. The railways assist to create central emporiums, which exist chiefly on the great lines. Thus **Turin, Milan, Como, Alessandria, Piacenza, Cremona, Brescia, Verona, Mantua, Parma, Modena, Bologna, Padua, Florence, Lucca, Arezzo, and Rome** are all distributing centres, from any one of which it is easy to send goods in all directions.

18. Italy imports for her home requirements, metals, coal, cotton, wool, tinctures, colonial produce, sugars, cereals, and cattle, besides manufactured goods of all sorts from England, France, Switzerland, and Germany. She sends in return food-products and raw materials, many agricultural manufactures, with a few textiles, such as silks and Leghorn hats.

19. Transit-trade is considerable. Genoa is the port for Swiss goods, while the railways transport much merchandise between France and Austria.

20. *With regard to distributing and gravitating centres, border and internal emporiums and entrepôts*, M. Bainier thus speaks : "**Turin**, a grand and beautiful city at the confluence of the Po and Dora-Riparia, has a commerce in fine raw silk and organzine, a great interchange of rice and oil ; her gloves, silks, velvets, cloths, leather, marbles, paper, chemical products, locomotives, and vermouth are well known and esteemed." These goods ebb and flow to and from **Genoa** for *sea-borne distribution, via Mont Cenis* by rail for France and England, *via the St. Gothard* for Central Europe, and to **Ancona** for the Adriatic coasts and the East.

a. "**Genoa** is a large seaport town on the Mediterranean, and the centre of considerable commerce, capable of receiving vessels of the largest tonnage. It is the outlet for the maritime commerce of Lombardy, Piedmont, and Switzerland." There are many regular lines of steamers and vessels connecting this port with all the maritime countries of Europe.

b. "**Leghorn**, the second port of Italy, is the outlet for all Tuscany.

c. "**Civita Vecchia**, a place of much importance and commercial activity, and the only commercial maritime city of the

ancient Roman States, is connected by railway with Rome. Wool forms more than half the total value of its exports.

d. "Naples, the outlet for the commerce of all South Italy, exports the produce of Italian activity, and imports colonial produce, dried fish, leather, French and Belgian fabrics. The progress of agriculture and industry, with the construction of railways in Southern and Central Italy, must give Naples the position nature assigns to it among Mediterranean ports.

e. "Venice is the outlet for the northern provinces, and distributes to Dalmatia, Austro-Hungary, and the Adriatic.

f. "Ancona, a port of great importance, has a commerce in hemp, cordage, lambskins, silk, and wool, chiefly with England, Austria, France, and the islands of the Levant; while Brindisi, at the entrance of the Adriatic, and almost at the extremity of the peninsula, is one of the most important transit ports of Italy, and is the outlet for Italian commerce destined for the far East."

21. Italy and Sicily belong exclusively to the "Mediterranean trade," and having such extensive sea-boards, are especially adapted for mercantile enterprise. The total area is 114,410 square miles, of which about 87 per cent. is productive.

22. The northern parts and the islands are the richest in mineral products, and we find anthracite, antimony, alum, amianthus, arsenic, amber, alabaster, boracic acid, coal, copper, gypsum, honestones, iron, lead, lignite, kaolin, manganese, marble, mercury, ochres, pumice-stone, puzzolani, petroleum, Roman cement, salt, silver, sal ammoniac, sandstone, slates, sulphur, serpentine, saltpetre, trass, tufa, talc, whetstones, and zinc.

23. Coal, anthracite, is worked to some little extent in Tuscany.

Copper in Tuscany, Venetia, Sicily, and Elba.

Iron in Elba; spathic iron in Sondrio and Camonica valley; magnetic iron in Sardinia.

Lead in Sardinia and the Apennines.

Marbles of exquisite beauty in Tuscany, Carrara, and Massa.

Sulphur is of great national importance, and occurs in vast quantities in Sicily.

24. Italy is included in the temperate and warm temperate zones, classified as the *wine and oil region*, while the extreme south touches the *palm zone*, where the two intermingle, the cotton-plant flourishing beside the hemp and flax, and the fig alongside the fir and oak.

The country may be divided into four zones of culture: (a.) The valley of the Po, similarly favoured as Central France, and yielding maize and the vine. (b.) Olive zone, Tuscany, Umbria, the Marches, Rome, and the Abruzzi. (c.) Orange zone, all the Neapolitan provinces except the Abruzzi and Calabria. (d.) Sugar-cane, palm, and cotton zone, Calabria and Sicily.

Thus the products of the soil must be many and varied; they comprise anise, beans, barley, clover, chestnuts, coriander, caraway, citron, cotton, cherry for Maraschino, flax, figs, flowers, hemp, hops, haricot, hay, lucerne, liquorice, maize, madder, manna, olive, orange, perfume flowers, pastures, rice, silk, saffron, sumach, truffles, tobacco, the vine, wood, and wheat.

25. Cotton is grown on the plains of Calabria, in Apulia, South Campania, Sardinia, and Sicily.

Barley on the Adriatic coast and in Apulia.

Flax and hemp chiefly round Ferrara and Bologna; in Emilia, Venetia, Tuscany, &c.

Hay and clover principally on the plains of Lombardy.

Maize—the Italian “grain”—is universally grown, the best in Piedmont, Lombardy, Venetia, Po valley, &c.

Olives for olive-oil, luxuriantly in the Neapolitan districts and Sicily.

Oranges in the south, Calabria, Basilicata, Campania, and Sicily.

Rice in the marsh-lands of Piedmont, Lombardy, and Venetia.

Sugar-cane in Calabria and Sicily.

Vine is universally cultivated, and yields wines of varying

worth, the best being *vino-santo* of Castiglione, *Lachryma Christi* near Vesuvius, *Marsala* and *Syracuse* in Sicily, *Ferraio* in Elba, and *Chianti*. Sicily and South-East Italy are the chief seats of the wine export trade.

Wheat, also, is universally grown, the best districts being Tuscany, Naples, the Abruzzi, and Sicily.

Of all Italy only about 13 per cent. is unproductive. Of cultivated parts about half is under wheat. The vine covers about five million acres, the olive two and a half million acres, and chestnuts one and a quarter million acres.

26. Fishing.—Coral-fisheries off the islands and coasts are of great importance, as also is that of anchovies.

27. Local Trade Movements.—Italy is well placed for transit-trade and for sea-borne traffic. Switzerland finds an entrance *viâ* the St. Gothard tunnel, and, in conjunction with Austria, by Innsbruck; while English and French goods destined for Italy find their way overland by Mont Cenis, or the sea-coast railway *viâ* Marseilles and Toulon. The ports, numerous and commodious, maintain direct communication with all parts of the world. Some of the great mail steamship lines run from the Adriatic and some from the Mediterranean ports.

28. Examining statistics, we find the population in 1871 was about $26\frac{3}{4}$ millions, or 237 to the square mile of area, nearly all being engaged in agricultural pursuits.

From 1870 to 1874 the total imports averaged $43\frac{5}{8}$ millions a year, and the exports $36\frac{1}{2}$ millions sterling; of these France took about 8 millions of both exports and imports, and Great Britain 4 millions of the exports and nearly $6\frac{1}{2}$ millions of the imports. The staple exports to us in 1874 were hemp (half a million), olive-oil (half a million), chemical products (£300,000), sulphur (£350,000), oranges, and shumac (£230,000); the chief imports being cotton goods ($2\frac{1}{4}$ millions), iron (seven-eighths of a million), coals (a similar sum), and woollen goods (half a million).

In 1884 the population had risen to $29\frac{3}{4}$ millions, equal to

nearly 260 to the square mile, about one-fifth being engaged in industrial work.

In the period 1881 to 1885 the total imports averaged $52\frac{1}{4}$ millions annually, and the exports 44 millions. The imports from Great Britain were valued at $6\frac{3}{4}$ millions, and exports $3\frac{1}{4}$ millions. The staple exports remained hemp (£400,000), olive-oil (£300,000), fruit and shumac (just over half a million), sulphur (nearly £200,000), and chemical products (£150,000); the imports were cotton goods (just over $1\frac{1}{2}$ millions), coal ($1\frac{1}{8}$ millions), iron (five-eighths of a million), woollen manufactures (just over three-quarters of a million), and machinery (£600,000).

29. This trade history shows us that the population increased from 1871 to 1884 about one-ninth, with a slight tendency towards greater industrial activity.

The total imports during this period rose some 22 per cent., and the exports a like amount. *England in 1870-74 contributed towards the imports about 15 per cent., and had 11 per cent. of the exports. Taking the same proportion for the following period of 1880-84, the share of imports should figure as £7,800,000 and exports £4,900,000, but in reality they were only £6,750,000 and £3,250,000 respectively, showing that we had lost considerable ground. England thus only held about 7 per cent. of exports and 12 per cent. imports.*

Of the staple exports, if we except fruit and shumac, we lost nearly half the value we took in 1870-74; and as regards our sales of manufactures to Italy, except in the case of woollens and coals, we lost heavily.

The increasing tendency of the Italians towards industrial activity has depressed the introduction of our textile goods; and we have also been unable to buy of Italy goods in equal proportion to former years. The present aspect of this trade as regards England is towards a further fall.

As a whole, Italian trade is an increasing one, and is much aided by its extra transit facilities and international connections.

SWITZERLAND.

Geographical position, 1—Geographical features, 2—Natural divisions of the country, 2—Enlargement of areas by art, 3, 10, 11, 12—*Ebb and flow to natural centres*, with circulation of goods, 2—Swiss transit-trade, 1, 12—Commercial position, 3, 4, 12—Location of industries, 5, 5a; with natural industrial divisions, 5a, 6—Commercial activity, 5-7, 11, 12—Sources of supply, 7, 8—Centres of distribution, 9—Natural area of trade, 13—Mineral resources, 5, 14—Localisation of same, 15—Agricultural zones, 16—Agricultural resources, 5, 16—Localisation of the chief agricultural produce, 17—Means of inter-communication, 3, 4, 10, 11, 18—Trade statistics, 19—Review of the movements of trade and population from 1870 to 1884, 20—Examination questions, p. 100.

1. This republic has on its frontiers the important States of Germany, Austro-Hungary, Italy, and France. Being so centrally placed, it secures, by means of its transit-facilities, a large share of the commerce between any one of these States and the others.

2. Switzerland is essentially mountainous, with natural gravitation to the valleys, which end occasionally in navigable lakes, and is divided into four distinct regions—(a) the west, composed of the Jura chain and offshoots, with *gravitation* on the west side to the river Doubs and France, and on the east to Neufchatel and Geneva; (b) the centre, a high plain with *gravitation* to the Aar, and thence to the Rhine below Schaffhausen, or by its tributaries to Neufchatel; (c) the east, watered by the Rhine, which is here a frontier river between Switzerland and the Tyrol, *gravitating* to the Lake of Constance; and (d) the south and south-east, a region of massive mountains, and including the natural division of Ticino, *gravitating* to the Italian lakes.

3. By great engineering skill, roads across the Alps were constructed, linking Germany with Italy, *via* Switzerland, but these have now been eclipsed by the **St. Gothard tunnel**, which has much enlarged the distributing area of Switzerland, uniting her with the great international link-lines of the European continent.

4. No country in Europe now surpasses this enterprising republic in means of communication, both internal and international, by road, rail, or canal. She shares with France the navigation of the Lake of Geneva, with Germany that of Lake Constance, and with Italy that of Lake Maggiore.

5. Mineral wealth is not abundant, consequently mining industries do not exist to any great extent. The detritus brought down by the mountain streams, the natural fertility of the valleys, and the grassy slopes of the mountains attract the people to agriculture and grazing. We see the results in the wines of Switzerland, which in some markets rival the champagnes of France, and in the Gruyère cheese, which forms an important article of exchange. Although coal and iron are scant, excellent textile fabrics are manufactured in certain districts. Swiss boots, shoes, and watches are also important industries.

a. The concentration of people into towns is not extensive, much of the industrial work being executed "at home" in the villages.

6. The industrial divisions of Switzerland are natural ones, and may likewise be divided into *four distinct regions*; (a) the northern and central with Basel, on the Rhine and borders of Germany, as the main distributing centre, manufacturing town, and border emporium; (b) the west or Jura division, which includes the asphalte-works of the *Val de Travers*, and the watchmaking districts of Geneva; (c) the east, with the cotton industries of St. Gallen; and (d) the south, with the silk manufactures of Ticino.

7. With the absence of cotton, coal, and iron, how are

the industries of Switzerland so flourishing? The economic features of Swiss production, according to M. Bainier, are the nearness of the French coalfields of St. Etienne for the supply of fuel; the moderate wages paid for labour; water, as a motive-power, near at hand; the abundance and uniform interest of money; the perfection of the plant, and the freedom of the political institutions. The high condition of well-being in this small republic reflects singular credit upon the meritorious enterprise of the citizens, who, having to import virtually the whole of their raw materials, using French coal and English machinery, are able by the excellence and cheapness of their manufactures to undersell, in the home markets of England and France, the special productions of these industrial States. Denied earth-gifts in any considerable quantity, the productive genius of these enterprising mountaineers bears a striking analogy to that of the Dutch, who, under physical features entirely opposite, have flourished upon a hollow bog. The material progress of Switzerland, again, like that of Holland, is plainly based upon the character of the people and the freedom of their institutions. Hemmed in all round by powerful competing communities, unrestricted production and exchange are vital to Swiss success, and no fiscal burdens are imposed to "encourage" industry or trade. Although average wages are lower than in England, showing that our labourers produce more than the Swiss, since wages bear an average ratio to production; although money is abundant and interest moderate, showing the absence of scope for surplus capital; although water-power is utilised in preference to steam, which is but little available, Switzerland is exceptionally prosperous; having a national debt of less than half ($1\frac{1}{4}$ millions sterling) of the annual revenue, while that of England is about ten times her income, and that of France still larger.

8. Switzerland grows hemp and flax for her own industries, but other fibres have to be imported. Basel is the chief import centre. *Cotton* is drawn from Liverpool to

Basel to supply the industrial wants ; England also furnishes to the same *dépôt* *wool, silk, metals, colonial produce, and machinery*, which come either by France or Germany.

Germany contributes coal, metals, wool, flax, cereals, and hardware ; Italy, silks, straw for plaiting, cotton, tinctorial materials, oil, grain, fruits, skins, and wool ; France, silk, cotton, madder, coal, wool, cereals, wine, refined sugar, brandy, leather, and *bijouterie*.

9. The map shows a **grand distributing centre** and a few smaller circles in each of the four natural areas ; thus, *north and central*, with Basel as the centre, have smaller entrepôts in Aarau, Solothurn, Berne, Lucerne, Fribourg, Brugg, Zurich, &c. ; *the west*, with Geneva as the centre, has La Chaux de Fonds, Neufchatel, Locle, &c., as minor circles ; *the east* has St. Gallen as centre, followed by Appenzell, Schaffhausen, Winterthur, Glarus, and Chur ; and *the south* with Bellinzona, Biasca, Locarno, and Lugano.

10. *The railways have much increased the area and direction of distribution* ; thus Basel connects with Germany, France, interior Switzerland, Solothurn, La Chaux de Fonds, and Locle ; Neufchatel with France direct, and Central Switzerland ; and Geneva with all France and Switzerland.

11. Lucerne, on the St. Gothard line, links Central Europe and Italy ; Schaffhausen and St. Gallen join Basel and Central Switzerland to South Germany and Austro-Hungary ; and the East Grisons is able to utilise the Inn and Austrian railway system, joining South-East Germany, Austria, and Italy *via* Innsbruck.

12. Therefore Switzerland, placed within the "intermediate zone" of European commerce, is able from its centres and frontier entrepôts to distribute to any point of the compass.

13. Switzerland is entirely in the intermediate zone. Merchandise sent northwards enters the "Baltic trade ;" north-east or eastwards, the "general trade ;" southwards, the "Mediterranean trade ;" south-eastwards, the "Black Sea trade ;" and is often classed as goods from the countries

through which they pass. The area is close upon 15,900 square miles, 71 per cent. being more or less productive, 53 per cent. crops and pastures, 17 per cent. forest, and 1 per cent. vine-culture.

14. The mountains belong to geological formations that are unproductive of economic minerals.

15. A little coal is found in Valais, Vaud, Fribourg, Berne, and Thurgau, with lignite in St. Gall and Zurich.

Asphalte in the Val de Travers; and alabaster generally.

Other minerals are cobalt, gneiss, granite, garnets, gypsum, jet, limestone, with some iron in the Jura, nickel, rock-salt, sulphur, serpentine, salt, marble, sandstone, and hornblende.

16. Switzerland belongs, according to latitude, to the beer and butter regions, touching, in the valleys, the region of the vine, and may be divided into seven agricultural zones:—

(a.) Vine, which grows in all cantons, Uri and Glarus excepted, to 1700 or 1800 feet above sea-level. (b.) Walnut-trees on hilly or lower mountain regions up to 2800 feet; this zone also produces good crops of spelt, and has excellent pastures and meadows. (c.) Forest timber—hardwood trees, with barley and pastures up to 4100 feet. (d.) Pine and maple up to 5500 feet, with pastures, potatoes, and vegetables. (e.) Pastures up to 6500 feet; Lower Alpine, with stunted growths. (f.) Upper Alpine, with lichens and moss. (g.) The region of eternal snows.

The total agricultural produce consists of caraways, flax, fruits,—citron, lemon, mulberry, orange, olive, and pomegranate on the south side of the Alps, especially Tessin; barley, hemp, honey, maize, oats, poppy and oil, potatoes, rye, spelt, saffron, tobacco, and wheat elsewhere.

Flat lands yield barley, maize, rye, spelt, and wheat; high lands, summer barley and oats. Lucerne, Soleure, Fribourg, and Schaffhausen are the only cantons growing grain in excess of the consumption, while in Aargau and Valais the yield and consumption are balanced.

17. **Hemp** and **flax** grow largely in Berne, Aargau, and Thurgau.

Maize in the southern valleys.

Poppy for seeds and oil grows universally.

Tobacco on the flat lands of Fribourg, Tessin, Vaud, Berne, and Grisons.

18. **Local Trade Movements.**—Transit by road and rail—on the east with France by Geneva or Lausanne; on the north with Germany by Basle or Schaffhausen; on the west with Austro-Hungary, *via* the Tyrol; and on the south with Italy by the St. Gothard tunnel, this last route giving uninterrupted railway communication from north or east to south.

The rivers and canals are commercially unimportant, but the roads over the passes and throughout the country are excellent, and exhibit rare engineering skill.

19. Turning to statistics, we find that in 1870 the people numbered $2\frac{1}{2}$ millions, or 175 to the square mile, about one-half being agricultural, one-tenth manufacturing, and one-tenth devoted to various handicrafts.

From 1870 to 1874 there were no annual values published of *total* commercial movements. Being an inland country, Switzerland had intercourse only with adjacent States in the following estimated proportions during this period:—Imports from Austria, £1000, exports the same amount; Italy, something over one thousand pounds sterling, and sixty thousand outwards; France, twenty thousand, and two hundred and twenty thousand; and Germany, about twenty thousand for both imports and exports.

In 1880 the population is given as about $2\frac{1}{2}$ millions. The **total imports** were estimated in 1885 to be about $38\frac{1}{2}$ millions, and **exports** $32\frac{1}{2}$ millions sterling; *England holding about one-fifteenth of the imports and one-seventh of the exports*; France, one-fourth of each; Germany, about one-fourth of the total; and Italy, one-seventh of the imports and one-eleventh of the exports.

20. From the above history we are not able to draw com-

parisons ; we can only infer. It would seem that the population *increased* a twelfth ; also that from 1870 to 1874 there were no *direct* commercial transactions with Great Britain, while in the latter period we were interested to a small extent. The tendency of this trade is to expand. Switzerland now rivals many countries in industries and manufactures, and competes with older-established States in the markets of the world.

Examination Questions on Italy and Switzerland.

1. Delineate the three gravitating areas into which Italy is divided, and describe how the obstacles which its physical conformation presents to mercantile intercourse have been surmounted.
2. Switzerland is the most mountainous country in Europe, and is singularly bare of economic minerals ; it is without a sea-board or a port, and is surrounded by active commercial and competing States, yet Switzerland excels both in husbandry and manufacture, and is prosperous through commerce, and conducts a large transit-trade. Explain these phenomena.
3. What is the cause of the malarious marshes prevalent in Italy, and what methods are pursued to render them salubrious and fertile ?
4. Compare the foreign trade of Italy with that of England, and enumerate the Italian centres of distribution. Mention also the specialties of Italian produce and exchange.
5. Apply Question 1 to the four gravitating regions of Switzerland.
6. Enumerate the natural resources of Switzerland, and explain whence the supplies of raw material for the textile manufactures are drawn. State also other specialties of Swiss industry and trade.

AUSTRO-HUNGARY.

Geographical position, 1, 11, 14, 15; and its effect upon commerce, 2, 4, 8, 10, 11, 14, 15, 24—**Commercial position**, 2, 4, 11, 14, 15, 19, 26—**Geographical features**, 2, 3, 5, 7, 11, 14, 15—**The river Danube**, 1, 3, 5, 8, 25—*Ebb and flow, with circulation of goods*, to natural centres, 3, 4, 6, 8, 14, 15, 16, 17*a*, 18, 19, 24—**Artificial aids to Austrian commerce**, 7, 8, 10, 14*a*—**The value of canals to commerce**, 8, 9—*Characteristics of Austrian trade*, 12, 26—**Textile**, 13, 15, 17; **mining**, 14*c*, 15, 20; and **agricultural industries**, 15, 16—**Location of same**, 14, 14*c*, 15, 17—**Sources of supply**, 17*a-d*, 21—**Commercial activity**, 14-18, 20—**Austrian land-frontier commerce**, 1, 22—**Centres of distribution**, 23—**Natural trade-area**, 27—**Political divisions of Austro-Hungary**, 27—**Mineral resources**, 28—**Localisation of the principal metals and minerals**, 29—**Agricultural resources**, 30—**Localisation of the chief agricultural produce**, 16, 31—**Agricultural divisions of the country**, 30—**Means of intercommunication**, 3, 7, 10, 14, 14*a*, 17*c*, 17*d*, 18, 25, 32—**Trade statistics**, 33—**Review of the movements of trade and population from 1869 to 1885**, 34—**Tendency of the trade**, 34*a*—**Examination questions**, p. 115.

1. Situated in the south centre of Europe, with *river and rail connections* to all parts of the Continent, **Austro-Hungary** touches the Adriatic, which opens to the Mediterranean and the East, but she owes her commercial importance, above all, to the river Danube, which traverses her whole territory. Further, by her land frontiers, she adjoins the most populous nations of the west and the vast Russian territories of the east of Europe.

2. While struck with the geographical position of the empire and the fine river system which covers the country, we cannot fail to notice the very small sea-board that appertains to Austria. Excluding Switzerland, Austro-Hungary is the only European country that possesses such a limited coast;

consequently, we find commercial movements, *internally* and *internationally*, of more importance than the foreign sea-borne.

3. Notice further, although Austro-Hungary abuts on Italy, Switzerland, Germany, and Russia, *she is shut out from commercial intercourse with these nations by ranges of lofty mountains*—Nature's barriers—encircling the whole country. These elevations presented, in old times, formidable obstacles to interchange of any great extent, the physical exits being confined to those by the Elbe valley, at Eger in Bohemia, by the Danube in the centre, and by the lower **passes** of the **Carnic and Julian Alps** in the south.

4. THE PRESENCE OF SUCH BARRIERS TO FREE AND OPEN INTERCOURSE FORCES MERCHANDISE TO THE SEA BY WAY OF THE DANUBE, GRAVITATING TOWARDS THE OLD WORLD PASSIVE STATES INSTEAD OF TOWARDS THE BUSY CENTRES OF WESTERN EUROPE AND THE ATLANTIC OCEAN HIGHWAYS; AWAY FROM THE ADVANCED AND ACTIVE RACES INSTEAD OF TOWARDS THEM—A DECIDED AND SERIOUS DISADVANTAGE.

5. With regard to the course of the Danube, which flows in a contrary direction to the rivers of the Continent as a rule, Carl Ritter says: "Exceptional to the general course of rivers are the Nile, Danube, and Volga, whose direction is not towards the ocean, but towards the centre of the Old World. They form a triad, not of oceanic, but of continental streams; in them there is no ebb and flood. Their lower courses and mouths must, therefore, display different relations from those of any other of the great rivers of the globe."

6. Not only is this different relation displayed in the fact that all merchandise *had* to come down to the Black Sea for farther distribution, but as **there is no tidal ebb and flow, the waters are continually running down from the land to the sea**, and the depth of the river is constantly altering, influenced by wet or dry seasons. Now it is easy to obtain floatage for goods *down stream*, but before steam-haulage was introduced to navigate a river *against* the tide, it was a very difficult undertaking to make the return journey.

7. **Man's ingenuity has, however, overcome these natural barriers**; steamboats ascend the Danube almost from mouth to source, *railways* climb or pierce the mountains, and *canals* not only obviate the obstructions in river transit, but unite this important basin of Southern Europe with those of the north, by means of a waterway cut through the hills, joining a tributary of the Danube to a tributary of the Elbe. What a triumph of enterprise!

8. **Austro-Hungarian commerce is now open to the whole world**, distributing north, south, east, and west by rail, road, or river. The improvements and speed of transit in the oceanic steamships have so much increased that the traffic on the Danube system is greatly augmented; this river standing to-day as one of the most important commercial rivers of the world. *The mouths, however, of all the rivers of the dual States lie in foreign countries*, which is detrimental, for in the event of being closed, the only possible exit to Austria would be by the Adriatic. Canals aid materially in commerce by uniting the international waterways.

9. Ritter, writing on this subject, says: "The lowest parts of a watershed—the passes of a high mountain-range, for example, the intermediate vales of lower ones, and the most elevated plains of flat districts—are the most suitable for the purpose of making canals to serve as connecting-links between the sources of divergent streams; as, for instance, the canal to connect the Baltic and Black Seas by uniting the Vistula and Danube; the tributaries, the Poprad, Hernad, and Theiss, being the channels of communication up to the mountains, where a canal is to pass over the watershed formed by the valleys of the Carpathian chain. Such a communication is the most available which can be made between the sides of a mountain-range."

10. We can now understand the **union of the northern rivers with the southern**; add to this the railways which overcome these barriers in all directions, and we can appreciate what Austro-Hungary gains by the widening, in such an important manner, of the areas of distribution.

11. **Austro-Hungary** joins on the north and west with **Germany**, just over the mountains; on the north and east with **Russia**; on the east and south with **Roumania** and the **Turkish States**; on the south with the **Adriatic**,—but there is no commercial river running into this sea,—and on the south and west with **Italy** and **Switzerland**. If excluded from intercourse with these countries, how very limited would be the trade of **Austro-Hungary**! But the opening of international communications has thrown this empire into contact with the whole world.

12. **Austro-Hungary** stands in the position of a country exporting raw materials,—which go chiefly westwards,—as well as manufactured goods,—which go eastwards,—and of importing manufactured goods largely in excess of raw materials; the empire being so situated as to be almost free of extraneous help for her industries; excepting coal, of which she has a supply, but of inferior quality.

13. **Austrian textiles** have long been known as excellent, and find a ready sale in **Turkey** and the **East**. **M. Bainier** says: "She needs fear no rival in international markets."

14. Let us see how these industries are placed. **Bohemia** is entirely surrounded by mountains, the only *natural ingress* and *egress* being by the **Elbe**, where it breaks through the mountains at **Tetschen**, and again on the west at **Eger**. To these must be added the canal which joins the **Moldau** in the south-west with the **Danube**, and the **railways**, which pierce or scale the mountains in different directions. **Moravia**, again, is surrounded by highlands, except in the south, where the country opens out to the **Danube** and stretches away to the eastward up to the great **Hungarian plain**.

a. **Carinthia**, **Salzburg**, and the **Tyrol** are all more or less hilly or mountainous; but, in the eastern parts of these districts, the hills grow wide and low, so that the railway from **Vienna** to **Trieste** can be laid across them, and thus the **German** joins hands with the **Italian**, and the territory of the **Fatherland** is linked to the **Adriatic**.

b. **Galicia**, on the northern side of the mountains, is the

district which includes *the sources of the rivers running northwards to the Baltic and south-eastwards to the Black Sea*; consequently the natural gravitation on this side of the mountains is **away from Austro-Hungarian and towards Russian territory.**

c. The mountain ranges of Bohemia, Moravia, and Galicia abound on both sides in **mineral wealth**; and, unlike Bavaria, analogous industries to those on the *north* side of the hills, on German territory, are prosecuted on the *south* side; Chemnitz, Bautzen, Zittau, and Breslau have their counterparts in Moravia and Bohemia in **Reichenberg, Trautenau, Brunn, and Troppau.**

15. As on the northern, so on the southern slopes and plateaux a concentration into towns occurs, of people who are engaged in *mining* and, as in England, in *textile* and other *manufactures*, situated on or near the mining fields; while farther east, more scattered becomes the population,—who here devote themselves entirely to *agricultural industries*,—until we reach the Carpathian range, where *mining* again holds sway, but with few or no manufactures.

16. Cereal growths and roots, notably beetroot for sugar-making, and the *vine* for the famous wines of **Tokay** and other Hungarian brands, so favoured by a fertile soil, are great industries, and leave a large surplus for interchange. The extensive cultivation of cereals, too, has encouraged the erection of mills driven by wind, water, and steam; *flour*, therefore, enters largely into external commerce.

17. In **manufacturing industries textiles take the lead.** These congregate on the mining fields of **Bohemia and Moravia**, and include *cotton, flax, hemp, silk, and wool.*

a. The *flax* and *hemp* industries are carried on from the raw material grown at home, and, in case of a deficiency, Austro-Hungary lies so close to the flax-fields of Russia and the hemp of Lombardy, that scarcity or heavy transit-charges need never arise.

b. The *silk*, too, is handy, and comes to Trieste from neighbouring Italy and the Levant.

c. *Wool* is abundant from the sheep roaming over the vast Hungarian plains; and, when required, can easily be supplemented from Turkey, introduced by the Danube; or from South Russia, by Brody; from the Levant, by Trieste; or Germany, by the railway lines.

d. *Cotton*, however, has to be entirely imported. There are three possible ways of introducing this commodity, namely, from the French ports of Havre or Marseilles by international railway lines; by Bremen or Hamburg *viâ* the German lines or waterways; or by Trieste. This last route, *lying throughout on Austrian territory*, is chiefly used for cotton from the Levant, India, and the East; that from Brazil readily comes to the Adriatic; but American cotton generally favours the North German ports, and comes forward into Austria *viâ* the Elbe valley to Prague.

18. Internal means of communication in the south are being so much improved that **Trieste** and **Fiume**, Austria's sole ports, are likely to rank among the most important in Europe. They connect directly with Vienna, and, by a short line, with the rivers Save and Drave, and, being thus joined with the "link-lines" throughout Europe, allow easy gravitation for the surplus produce of the vast Hungarian plains and the varied resources of Austro-Hungary.

19. With the introduction of modern means of transit, the position of Austria gives her great advantages for easy and reciprocal international exchange. Does she require coal, Germany can quickly supply it; *bijouterie* or haberdashery, France lies close at hand.

20. Again, she has the practical monopoly for supplying coal to the steamers plying on the Danube; and this commodity she obtains from the **Funkirchen** fields near to the river's bank. **Carinthia** finds a ready market in Italy, and an outlet, by the Trieste-Vienna line, for her *steel* manufactures, or to the East *viâ* the Danube. **Beet-sugar** enters Germany by the Vienna-Berlin lines, or East Germany and Russia by Cracow. **Lager beer**, leather, and meat go into France by the Munich-

Strasburg line; while flour is carried through to Trieste and Fiume, and largely shipped to Glasgow and Brazil; and Hungarian wine is a practical monopoly in Egypt, where it is much esteemed.

21. Austro-Hungary draws her *colonial produce, tea, coffee, spices, sugars, rice, &c.*, from India, the East Indies, Brazil, Cuba, the United States, and Holland; her *cotton tissues, cloths, and other textiles* from England, France, Switzerland, and Germany; her *iron and machinery* from England, France, Belgium, and Germany. On the other hand, she *sends her surplus cotton goods* to Turkey and the Levant, and her *woollens* to Germany, Italy, the Levant, and the East.

She *draws cereals* from Russia, Turkey, and the Danubian provinces for re-export, and acts as an *entrepôt* between Western Europe, Russia, the East, and Asia, for cereals, colonial produce, and manufactured goods.

22. The *land frontier commerce* of Austro-Hungary is quite half as much again as her export sea-trade—one authority gives it as five times as much; and as we can only refer to her two ports of Trieste and Fiume as distributing centres for sea-borne traffic, we must look to her frontier lines for equivalent centres, acting as *entrepôts* and emporiums between this and neighbouring States.

23. Vienna is a great centre of commerce between Central Europe, Turkey, Russia, and the Adriatic, with *natural gravitation* by the Danube; also joining by direct line with Paris on the west; Berlin, Hamburg, Belgium, Holland, and Denmark on the north; with Cracow and Prussia on the north-east, with Russia on the east, Constantinople and Salonica on the south and south-east, and with Italy on the south-west.

Steyer is a centre for distributing iron, steel, and cutlery, to Germany, France, Russia, and the Levant. Botzen is a principal *entrepôt* between Germany and Italy by the Innsbruck line; and Klagenfurt between North-East Italy and Austria. Lemberg is the centre of a large commercial interchange between

Austria and Russia, and is an entrepôt between Vienna and the Black Sea by rail; also an emporium for the cereals of Poland and Galicia, which are shipped at Odessa.

Brody is a border entrepôt, and acts between Russian Poland, South Russia, Roumania, and Austria.

Cracow is an entrepôt between Poland and Austria; **Temesvar**, between Austria and Turkey. **Neusatz** is the great emporium between Turkey and Central Europe, and **Hermanstadt** between Russia and Turkey.

Eger is an entrepôt between Austria, South Germany, and Bavaria; **Pilsen**, **Prague**, **Reichenberg**, and the busy towns of Bohemia are in active communication with German Saxony; while **Olmütz** and **Troppau** are intermediaries between Silesia and Moravia.

24. This map, therefore, shows Bohemia with a *natural* gravitation by the *northern* rivers; the rest of Austro-Hungary, except Galicia, which *naturally flows towards the Vistula and Dniester*, gravitates to the Danube, and finds final distributing centres in **Galatz** and **Ibrail** near the entrance to the Black Sea; *but canals and railways have entirely altered this natural ebb and flow*, and now, quite as much interchange takes place in the directions formerly barred by nature as by the natural route; this is clearly seen by the number and importance of the above-named entrepôts and emporiums.

25. These circles explain the internal and international movements; while the Danube, flowing through the centre of the territory, is the national and natural highway for external commerce between east and west.

26. Austria, then, with raw material at hand for manufactures, has sufficient agricultural resources to feed her own population and leave a large surplus for export. She lies adjacent to the largest European nations, who must use her territory to reach the Adriatic; but, compared with England, her geographical and economic positions are not so good. England lies in the centre of, and on the central highway for, all trade movements, and consequently attracts commerce from

the whole world ; while Austria is dependent on three or four surrounding nations for any transit to and fro, and a very little matter suffices to disorganise national frontiers.

27. **Austro-Hungary** is a factor in two important trades, the "Black Sea" and the "Mediterranean," the dividing line being approximately the western side of the Danube basin. *The outlet for the former is the river Danube viâ Ibrail and Galatz ; and for the latter, Trieste and Fiume on the Adriatic.* This country touches both the temperate and warm temperate zones, both the beer and butter and the vine, oil, and wine countries of Europe.

Austro-Hungary includes the Tyrol, Salzburg, Illyria, Styria, Austria, Bohemia, Moravia, Galicia, Hungary, Transylvania, the Banat, Slavonia, Croatia, and Dalmatia ; both Herzegovina and Bosnia are countries occupied by Austria on terms of the treaty of Berlin. The total area is 265,189 square miles, of which about 94 per cent. is productive. There seems reasonable hope that Trieste and Fiume will rise to great importance as grain outlets from the rich plains lying near, although, against this, an increasingly hostile tariff acts as a deterrent to reciprocal commerce.

28. The **mineral products** of this area are many, and of great economic value. We find, throughout the empire, amber, alkali, asphalte, antimony, arsenic, alum, baryte, bismuth, coal (both lignite and anthracite), copper, cobalt, cinabar, chalk, clays, graphite, galena, gold, granite, iron, jet, lead, mercury, manganese, magnesian limestone, marbles, mica, nitre, nickel, natron, opals, porphyry, pyrites, plastic clays, precious stones, slates, sulphur, saltpetre, silver, syenite, salt, peat, petroleum, tin, and zinc. In point of fact, it is stated that all metals and minerals except platinum are to be found in Austro-Hungary, but coal and metallic ores rarely lie close together.

29. **Coal** is mined chiefly in Bohemia (Pilsen, Rakonitz, Schlau, Kladno, Trautenau, &c.), Moravia (Rossitz), the Banat, (Krasso) ; Funfkirchen, Steyerdorf, and Styria (Cilly). Lig-

nite is found extensively in Bohemia (Eger circle, Budweis, Aussig, &c.), Moravia, Styria, Carinthia, Hungary, and Transylvania; and it is this coal that is chiefly exported. Anthracite is also found in Hungary.

Copper in Bohemia, Transylvania (Klausenburg), Salzburg, Hungary (Schemnitz, &c.).

Gold in Transylvania, Bohemia, Salzburg, Hungary, (Kremnitz), &c.

Opals in the famous mines at Eperies in North Hungary.

Iron is very generally diffused, but chiefly worked in Bohemia (Eger, Budweis, &c.), Moravia (Brunn, Olmutz, &c.), Hungary, &c.; while spathic iron abounds in Styria, Carinthia, the Tyrol, Salzburg, &c.

Petroleum, extensively in Bohemia, Steyerdorf, and Galicia.

Quicksilver, important and well-known mines at Idria (Illyria).

Salt, especially at Wieliczka, in Galicia; and in Salzburg.

Silver, in the Erz-Gebirge, Transylvania, the Banat, Salzburg, Styria, &c.

30. Austro-Hungary embraces the *wine region*, and touches both the zone of *northern grains* and that of the *southern olive*. The country can be agriculturally divided into **six sections** :—
 (a.) **The Alps region**, a mountainous district, with forests and plateaux, yielding in places cereals, mulberry, pasturages, tobacco, and the vine. (b.) **The Adriatic region** (Istria and Dalmatia), giving cherries for Maraschino, fruits, mulberry, olive, pastures, and the vine. (c.) **The Hungarian plain**, yielding barley, fruits, maize, mulberry, rice, tobacco, the vine, vegetables, and wheat. (d.) **The Carpathian region**, with hemp, maize, tobacco, forests, and pastures, with the vine in the valleys. (e.) **Galicia and Bukowina**, beyond the Carpathians, abounding in barley, maize in the south, oats in the north, rye, pastures, tobacco, and wheat. (f.) **The north-west region**, Bohemia, &c., where all cereals, colza, flax, hemp, hops, potatoes, spelt, and the vine flourish, and pastures abound.

“Austria-Hungary lies between the *isotherms* of 60° and

50°; and between 43° and 51° N. lat., and can be roughly subdivided as—between 49° and 51°, temperature equivalent to that of North France, and yielding barley, oats, rye, and wheat; from 49° to 46°, temperature of increasing and considerable heat, producing the same cereals, with maize and the vine added; and from 46° to 42°, still greater heat, adding the olive."

The **agricultural products** of the empire consist of barley, buckwheat, beetroot, colza, figs, fruits, flax, haricot, hemp, hops, maize, millet, mustard, olive, oats, pease, potatoes, plums, prunes, rye, rice, saffron, silk, tobacco, woad, wheat, with the vine and its products, besides wood and timber.

31. Beetroot-growing is a great industry in Bohemia, and, to a smaller extent, in Moravia, Hungary, &c., but is of greater extent in Bohemia than in all the other provinces, Hungary included. The outlet is principally by the river Elbe to Hamburg.

Barley, chiefly in Bohemia, Moravia, Hungary, and Galicia.

Flax in Galicia, Hungary, Transylvania, Bohemia, and Moravia.

Fig and olive in the Adriatic provinces.

Forests, which cover about 30 per cent. of the soil, occur mainly in Bohemia, &c., fir and pine being the principal trees, yielding potash, pitch, tar, &c.

Hops in Bohemia—the best, as is sometimes said.

Oats in the Carpathian and northern districts.

Pasturage is universal; swine are largely reared.

Maize in Transylvania, Bukowina, Croatia, and Slavonia.

Rye is a cereal universally grown.

Rice in the Banat.

Tobacco in Hungary, Croatia, Slavonia, and East Galicia.

Vine is extensively cultivated in Bohemia, Moravia, Austria, Styria, Hungary (Tokay wine), Transylvania, Croatia, Slavonia, the Banat, Istria, and Dalmatia. **Wheat** thrives well in the Banat, Hungary, Moravia, Styria, Austria, and Galicia.

32. Local Trade Movements.—Merchandise and produce find their *easiest* outlets *by the streams* running into the river

Danube, and *by the Danube* itself to Galatz, &c. ; or by the ports of Trieste and Fiume on the Adriatic. There are also *the national and international railways*, connecting Austro-Hungary with all Europe ; and *the canals* giving further international communication, connecting the basins of the great rivers in the north of Europe with the rivers in this area.

33. **Statistics.**—In 1869 the population was given as 36 millions, equivalent to 158 to the square mile. About two-thirds, it is estimated, were engaged in agricultural pursuits, *but there was a tendency towards concentration in the large towns.*

From 1870 to 1874 the annual total imports averaged 53 millions, and exports 40 millions. Of these Germany took nearly two-thirds, followed by Turkey. **Great Britain had in the exports a share**, averaging, for the five years, just under 1 million sterling per annum. 1868 and 1869 were good years, averaging just over 2 millions, but afterwards the exports declined. **Of the imports**, Great Britain supplied $1\frac{1}{2}$ millions. The staple exports that we received were maize, wheat, barley, and flour (£350,000, having fallen from three-quarters of a million in 1871 and half a million in 1872). **The chief imports from us** were cotton manufactures (half a million), wool (£50,000), and iron manufactures (just below two hundred thousand pounds).

In 1885 the population had risen to about $39\frac{1}{2}$ millions, increasing the density to 162 ; of these still nearly two-thirds were agriculturists. Hungary and Austria were the most thickly populated.

From 1880 to 1884 the total imports, calculated at twelve florins to the pound sterling, were estimated at $52\frac{1}{2}$ millions a year, and the exports $60\frac{1}{2}$ millions. 1885, as a single year, reached $46\frac{1}{2}$ and 56 millions respectively. The course of trade seemed to be chiefly with Germany, who held over half the total turnover. **Great Britain received of the exports** $1\frac{3}{4}$ millions ($2\frac{1}{2}$ millions in 1885), and supplied three-quarters of a million of the imports (1885 remained nearly the same, with an improving tendency).

Staple exports to us were cereals and flour, valued at 1½ millions; **imports** from us were cottons (£300,000), woollens (£40,000), iron (£100,000), machinery (£70,000), oil-seeds (£80,000) and coals (somewhat under £30,000).

34. We are thus able to deduce that from 1869 to 1885 the population *increased* about one-tenth. The total imports remained *comparatively stationary*, although 1885 was £6,000,000 below the average. The total exports *increased* 50 per cent., but 1885 was £4,500,000 below the average. Germany did not command so good an average at the later period, although she moved upwards with the general rise. **English** trade exports about *doubled themselves*, but the imports *fell back* nearly 50 per cent.; so that in the aggregate *English trade remained much the same*.

In the 1880-84 period it is seen that we bought much more from Austria than in the preceding period of 1870-74. This was particularly the case as regards cereals, for whereas in 1870 we bought only £351,590 worth, in 1885 we spent £1,735,000, the great increase being in barley, wheat, and flour. This fact lends colour to the hope held out that Trieste may rise to an important place as an outlet for grain.

In return for these purchases we did not sell so many cotton manufactures by £130,000, nor woollens by £11,000; while of iron we only sent about half the quantity supplied in the previous decade; but other produce, ranking now as staples, was included in the trade returns of 1880-84, notably oil-seeds and coals.

It will be seen that Austro-Hungary's total trade increased quite 25 per cent., and that in 1870-74 England held about 2·6 of the whole trade. Without calculating the increase in the population, to preserve the same ratio in 1880-84 as in 1870-74, our trade should have grossed £2,950,000, but it only reached £2,580,000. In 1870-74 Great Britain held barely 3 per cent. of the imports, and 2·5 per cent. of the exports, and in 1880-84 only 1·6 per cent. of the imports, but fully 3 per cent. of exports.

a. The tendency of Austro-Hungarian foreign trade is to *increase exports and diminish imports*. The former is to be somewhat accounted for by the increased knowledge of agriculture and the extra facilities of transit; the latter, by the introduction of English machinery into the great industrial centres of Brunn, Reichenberg, Trautenau, &c., as well as by the facility of interchange with Saxony and other parts of Germany.

The high tariffs also militate against increased imports, and tend to depress external trade; although the belief obtains in Austria that home industries are fostered and improved by protective duties on foreign goods, a belief hardly justified if we compare the results of this trade with that of another country giving freer intercourse.

From 1870-1885 we lost ground to the extent of nearly 1·5 per cent. in supplying Austria with our goods, but we bought ·5 per cent. more from Austria. This nation seems destined to come to the front for cereal export, especially *via* the Adriatic; but hostile tariffs, which are continually being raised, prevent reciprocal trade, and by so much retard the expansion of commerce which must accrue if a more generous policy be adopted.

Austria has every item of successful commercial life within her borders. Total trade from 1870-1885 increased fully 50 per cent. in exports, but import values remained stationary.

Austria ranks next to France, Italy, and Spain for wine, but these wines are yet hardly known in other European markets; and in the beetroot sugar industry Austria bids fair to take a high rank among countries producing this commodity.

Examination Questions on Austro-Hungary.

1. What physical obstacles are opposed in Austro-Hungary to international intercourse? To what physical circumstances especially does the country owe its mercantile importance?
2. Give a complete account, commercially, of the basin of the river Danube.
3. Describe, generally, the character and sites of the Austrian industries.
4. Compare Austria with England in regard to their relative position for universal trade.
5. Describe the natural resources of this area.
6. What is the present state of the commercial relations between Austria and the United Kingdom?

TURKEY IN EUROPE.

Geographical position, 1, 2—**Political divisions**, 1, 20—**Geographical features**, 3, 9, 20—**Railways in relation to Turkish trade**, 4—**Characteristics of the natural areas**, 5—**Physical elements of Turkey in relation to the people and to industries**, 6, 7, 7a, 10—**Extracts hereon**, 10a, 10b—**Commercial position**, 1, 7a, 8—*Ebb and flow to natural centres*, with circulation of goods, 9—**Commercial activity**, 10, 11, 15-17—**Location of industries**, 11-14, 16—*Characteristics of Turkish trade*, 17-19—**Natural area of trade**, 20—**Mineral resources**, 21—**Localisation of the principal metals and minerals**, 22—**Agricultural resources**, 5, 23—**Localisation of the chief agricultural produce**, 24—**Fisheries**, 25—**Means of intercommunication**, 4, 26—**Trade statistics**, 27; *Roumania*, 29; *Servia*, 31; **Review of the movements of trade and population from 1870 to 1885**, 28; of Roumania, 30; and of Servia, 32—**Examination questions**, p. 134.

1. For commercial purposes European Turkey includes in one map-area, Roumania, Bulgaria, Servia, Bosnia, Herzegovina, Montenegro, Albania, Epirus, Roumelia, and Eastern Roumelia.

2. The territory, taken as one area, represents geographically a country splendidly placed, with a sea-board on the most frequented seas, and one of the greatest commercial rivers running through the district; in close contact with Asia on the east and Italy on the west, and with land frontiers touching Hungary, Dalmatia, and Russia on the north, and Greece on the south.

3. Turkey possesses a diversified aspect of highlands, lowlands, plateaux, and dales, forests and river flats. *The main channel of communication is the Danube, which has its chief business, as regards ocean-steamers, in this area.*

4. Railways are not so far advanced as in the western States, since Turkish commerce, until recent years, was non-progressive. International overland transit promises soon to bring the multifarious resources of this map-area well forward, notably by the through line to Salonica and Constantinople, by which these ports are brought into direct communication with Paris, Berlin, Vienna, and other European centres. **Salonica** is likely to take a prominent position, for the mail-route from West to East is possibly intended to follow this new line in preference to that at present used *via* Brindisi.

Constantinople, Bucharest, Varna, and Galatz join all the great centres, *west* by Vienna, *north* by Lemberg, and *east* by Odessa. *These through thoroughfares must constitute Roumelia the great transit country between East and West, and Constantinople the gateway, as in ancient days, between Europe and Asia.*

5. The characteristics of these areas are their wonderful fertility and vast agricultural capabilities. Corn-fields, forests, fruit-trees, fibres, and tinctorial plants flourish and abound.

6. Although mineral resources are not wanting, agriculture is the staple industry; but, unfortunately, neither agriculture, mining, nor industrial work is carried on to any real purpose or extent.

7. What nature yields almost *spontaneously*, that the people interchange, *but for commerce in its full sense the Turks are passive*, and await the ministrations of other countries. Turkey is in truth a land rich in earth-gifts, and is an open market for all advanced European countries to compete in for the supply of manufactures of every kind.

a. Were Turkey, with its eleven hundred leagues of sea-coast, as far advanced in civilisation as it is favoured by geographical position, she would be the first commercial and maritime power in the Mediterranean, but all her vast economic resources have been allowed to lie fallow.

8. Mistress of the Save and Danube, holding the key to the Black Sea, commanding the Archipelago, with exten-

sive territory in Asia,—Turkey is the natural stepping-stone between Europe and Asia,—her commerce ought to be the wonder and admiration of the world; the Ionian Sea and the Adriatic are in close contact with Italy, and she has a direct alternative course to the East by the Suez Canal.

9. These areas are naturally defined for gravitation. Moldavia joins with Bessarabia in gravitating to the Pruth, and thence to the Danube at Galatz, while barred on the west by the Carpathian Mountains.

Bulgaria and Wallachia, enclosed by the chain of mountains which continue the Carpathians and then join the Balkans in the south, necessarily *gravitate* to the Danube, which forces its way through the “iron gates” of Gladova.

Eastern Roumelia, encompassed by the Balkan and Rhodope Mountains, *gravitates* either to the shores of the Sea of Marmora and Constantinople, or to the port of Enos by the river Maritza.

Central Roumelia, also environed by mountains, has a *natural tendency* to Salonica, assisted by the river Vardar and its branches.

Montenegro, Albania, and Epirus, placed on the western side of the hills, *naturally fall* towards their sea-frontier on the Adriatic.

Herzegovina has a *double outlet*, either south by Ragusa, on the Adriatic in Dalmatia, or north-west to the tributaries of the Save; while Servia and Bosnia, forming the counterpart to the great Hungarian plain, *slope northwards* from the Dinaric Alps to the Danube.

10. Agriculture, though pursued in the most primitive fashion, yields abundant crops, and permits an immense amount of raw produce to be exported. What, then, would be the results attending upon intelligent and earnest work!

a. An eminent authority thus sums up: “Manufacturing industry is, for the most part, confined to the production of coarse articles for home consumption; but fine cotton, silks, and embroidery are made in the capital and in some of the

principal provincial towns. **Constantinople** is the chief seat of foreign trade, which, together with the internal traffic, is mainly conducted by Greeks, Armenians, and English. The roads are seldom practicable for wheeled conveyances, and there are no canals or railways,—this last defect has been partially removed,—but the Danube forms an excellent highway of commerce for the northern provinces.”

b. M. Bainier speaks of Turkey somewhat similarly: “Nature has been prodigal towards Turkey, on whom she has bestowed both agricultural and mineral riches. Using these earth-gifts with intelligence, Turkey would figure amongst the richest and most productive countries; but the science of agriculture does not exist, and the varied productions of the soil are simply gathered in their routine. In many provinces considerable stretches of the most luxuriant country are given up to unprofitable pastures. Thanks to the fertility of the soil, the production exceeds the consumption, although the harvest of a single ordinary year is not equal to one-tenth of what it would be with a more intelligent cultivation. The fertility of the land in Turkey has to make up for deficient labour and the want of intelligence in agricultural work; hardly anywhere is either manure or straw used. In many parts manure is heaped up on the banks of the streams only to be carried away by the swelling waters; the agricultural implements are wretched.

“The Bulgarians are the best agriculturists; the Greeks excel in horticulture and arboriculture. The Turks, Serbs, and Albanians are the worst cultivators in the whole country; where they live one sees the most beautiful country lying waste.”

11. *From these sketches it is easy to understand where the chief seats of commerce will be, and what parts will be given up to the culture of the vine, prune, cotton, mulberry, cereals, and roses.*

12. The banks of the Danube give us many *gravitating centres*, in most places “border emporiums,” such as **Belgrade**

Widin, Sistova, Rustchuk, Silistria, Ibrail, Galatz, and Sulina ; the last three being the most important distributing centres of the whole area, for it is here that the ocean-steamers load and discharge their cargoes.

13. **Sistova** is the great *grain centre* of High Bulgaria ; Roumelia distributes by the ports of Bourgas, Rodosto, and Gallipoli on the Sea of Marmora, Thrace by Enos, and Macedonia by Salonica. The chief *grain markets* are Janina, Prevesa, Arta, Elbassan, Durazzo, and Scutari in Albania. Sérès, in Roumelia, is the *cotton centre*, gravitating to Salonica.

14. The larger cities of **Adrianople** and **Constantinople** are the principal centres of *rose-culture* ; Roumelia and Albania prosecute *silk-cultivation* the most assiduously, and *wool*, which rivals merino, is an industry of great importance in the vilayet of **Adrianople**.

15. True industrial work no longer exists in Turkey as it used to do when the country was able to export ; now all labour is done by hand, and consequently we are unable to point to any centres of importance.

16. Several villages are noted for their *fairs*, especially **Ouzoundjaora**—between Adrianople and Philippopolis—**Karasow** in Bulgaria ; **Janina**, **Sérès**, and **Pharsala**.

17. For *external commerce*, then, **Constantinople** and **Galatz** stand at the head ; the trade being almost exclusively in the hands of strangers, principally Greeks. **Raw materials** and **food-products** form the sum-total of the exports, and Turkey takes in exchange all manufactured goods, coal, and iron.

18. In this market England meets many competitors, and might do much more by seeking trade through the agency of commercial travellers. M. Bainier, writing in 1873, says : "England has not a rival in cotton-thread and tissues, and English manufactures are received in Turkey to the extent of one hundred millions of francs, as against seven millions supplied by France. Belgium, Germany, Austria, and England furnish cloths, French products being too dear and coarse. France competes with Belgium and England in the supply

of iron manufactures, cutlery, ironmongery, and machinery. The glass and pottery of Belgium, England, and Germany rival those of France; candles of Trieste dispute the ground with those of Marseilles. France, Austria, Belgium, and the English emporiums furnish refined sugars, coffees, colonial produce, salt provisions, and French wines."

19. Turkey thus shows one of the best examples of "our competitors and customers," and the map of commercial ebb and flow has been seen to be easy to read and understand.

20. Turkey forms on her western coasts, part of the "Mediterranean trade," and on her eastern shores, part of the "Black Sea trade," Danube area.

The total area of the Balkan States, as a map-study, includes in its trade aspect the smaller States or divisions of Moldavia and Wallachia (Roumania), both woody and mountainous, on the west sloping to the rivers Pruth and Danube; Bulgaria, mountainous on the south, and sloping northwards to the Danube; Servia, woody, and sloping northwards to the river Danube; Bosnia, in its eastern parts, is also in the Danube basin; Herzegovina,—these two last, in the terms of the treaty of Berlin, are in the occupation of Austria,—sloping westerly to the Adriatic; Montenegro, on the sea, sloping from the Dinaric Alps; Albania, also on the Adriatic; Roumelia, lying in the plain between the mountains of Pindus and Rhodope, and between the Rhodope Mountains and the Little Balkans, has a sea-board on the Archipelago, with the port of Salonica as the chief outlet, also a sea-board on the Sea of Marmora, and the Black Sea, with Constantinople as the chief port, on the Bosphorus; Eastern Roumelia, lying to the east of the Rhodope Mountains and south of the Balkans, is washed on the east coast by the Black Sea, with Bourgas as a port; and Epirus, in the extreme south-west, on the Mediterranean, with the port of Prevesa. Turkey lies in the temperate and warm temperate zones.

21. Mineral resources, though but little worked, are known to be very considerable. The following occur:—Antimony,

asphalte, coal, copper, calamine,—zinc ore,—gold, galena,—lead ore,—granite, iron, lead, mercury, marble, porphyry, petroleum, salt, silver, saltpetre, sulphur, stones and clays both for building and pottery, and zinc.

22. **Coal** is worked in Servia (Dobra), near Salonica; there are also beds in Roumelia and Albania, but not worked.

Iron in Bosnia, Bulgaria, and Servia. The Balkan Mountains are said to contain vast deposits both of iron and copper.

Marbles are largely exported from Marmora.

23. **Agriculture.**—The following products are grown to some extent, although not nearly to the capabilities of the soil:—Anise, barley, buckwheat, colza, citron, cumin, cotton in the south, essence and perfume flowers, figs, flax, hemp, haricots, maize, madder, millet, orange, olive, oats, potatoes, plums of Bosnia, rice, rye, roses for otto or attar, shumac, sesame, saffron, sorghum or large millet, silk, tobacco, the vine, valonia, wheat, &c.

24. **Barley, oats, and buckwheat** grow around the mountains, especially in Bosnia, High Albania, and Montenegro.

Cotton grows in Roumelia, near Sérès, and in the hot damp valley of the Maritza; also in Epirus.

Forests are of considerable extent, but badly worked.

Hemp and flax grow luxuriantly in the valleys and on the plains.

Maize is the Turkish "grain," and is grown everywhere, Moldavian maize being considered the best.

Olives, on the shores of the sea and in the south.

Roses are cultivated for the sake of the perfume "attar of roses," more especially round the Balkans, at Zagra, Carlsva, round Kesanlik, Slivno, Adrianople—specially prized—and Philippopolis; the valley of the Tondja is a veritable "field of roses."

Silk-culture is extensive in Roumelia and maritime Albania; mulberries are cultivated chiefly on the sea-board between Adrianople and Salonica.

Rice in the valley of the Maritza and in the warm, damp

parts of Roumelia; the most esteemed is that of Tatar-Bazarjik, Philippopolis, and Beja.

Tobacco is cultivated in all the hot parts of Turkey, in the river valleys, and in the southern borders of Roumelia; the best is grown on the frontiers of Greece.

Vine in Roumelia (Sérès), Castoria, Moldavia (Jassy), Bosnia, Herzegovina, Servia, &c.

Wheat is pretty generally grown, but only in small quantities; that of Kalafat, Islar, and Iswor is esteemed.

Pasturage is universal, and nourishes many cattle, horses, and sheep. Adrianople vilayet produces the most wool and the best. **Swine** abound in Wallachia, Servia, Bosnia, and Herzegovina. **Madder** round Adrianople is especially esteemed.

Cereals form the bulk of the Danube trade, and are exported chiefly from Ibrail and Galatz; Bulgaria exports *viâ* Varna and down the Danube; **Sistova** is the great grain centre; Roumelia sends *viâ* Bourgas, Rodosto, and Gallipoli; Thrace by Enos; Macedonia *viâ* Salonica; Albania exports but little grain; Wallachia chiefly maize *viâ* the Danube.

25. The sponge-fisheries off the islands yield the finest produce of the kind.

26. Local trade movements are almost entirely "*down-stream*;" the international line of rail joining Vienna, Constantinople, and Salonica is a very important auxiliary to transit and correspondence between the west and east. On the west coast the Adriatic gives every facility for outlets, the distance being nowhere great from the sea to the mountains, which form the western boundary of the Danube basin or Roumelian plain. The disadvantages are bad roads and the lawlessness of some of the inhabitants. Given good roads and other recognised and easy means of transit, with a freedom from lawlessness, the rise of the districts, commercially, must be great and rapid. The growth of Salonica, at the terminus of the international railway, is already assured.

27. Comparing the statistics, we gather that in 1870 the population was estimated at 30 millions, and at 35 millions

in 1874, nearly equally divided between Europe and Asia; a density of not above twenty to the square mile.

From 1870 to 1874 the total European imports were estimated as averaging $18\frac{1}{2}$ millions a year, and the exports 10 millions; of these Great Britain drew $3\frac{1}{8}$ millions of exports, and supplied $4\frac{3}{4}$ millions of the imports. The staple exports were cereals (valued at $2\frac{1}{4}$ millions), goats' hair (1 million), valonia (half a million), opium (nearly half a million), and cotton (£400,000); the chief British imports were cotton manufactures and yarn,—about five-sixths of the whole import,—woollens and iron.

In 1885 the population had decreased somewhat, to about $33\frac{1}{2}$ millions. From 1881 to 1885 the annual total imports appear to have averaged 18 millions, and the exports $10\frac{1}{2}$ millions, nearly as last period. Of these exports Great Britain received 5 millions, and supplied $6\frac{1}{4}$ millions to the imports. The staple exports at this time were cereals (1 million), wool and hair (a similar valuation), valonia (nearly four hundred thousand), and fruits (three-quarters of a million); the chief imports were cotton goods and yarn ($4\frac{3}{4}$ millions), woollens (£350,000), and iron (close upon two hundred thousand pounds).

28. We are thus able to deduce that, in the fifteen years *population fluctuated but little, decreasing if anything*; that the **total imports fell away** very slightly, but that the **exports rose** a little, the *average* of total trade remaining the same. We held something over a quarter of the imports and nearly one-third of the exports, in 1870-1874. To preserve the same ratio in the following term, the figures should have been $4\frac{1}{2}$ and $3\frac{1}{2}$ millions respectively; they were really $6\frac{1}{2}$ and 5 millions, showing a most satisfactory rise. At this time, then, we held some 36 per cent. of the imports and 47 per cent. of the exports.

The value of the staple export,—grain,—*fell away*, as did that of other commodities, but these deficiencies were counter-balanced by other articles of merchandise.

With regard to imports, cotton goods *kept up their average*, while woollens advanced, but iron *fell* considerably.

The tendency of this trade is to advance. The laying down of new railways and the joining of the great European thoroughfare between Vienna and Constantinople must materially increase the Turkish turnover.

29. As a natural area, the Turkish dominions cover, among smaller States, ROUMANIA and SERVIA, both of which have separate trade returns, not included in those of Turkey. ROUMANIA in 1864 is said to have contained a **population** of about $3\frac{7}{8}$ millions. In 1871 the **total imports** were valued at $3\frac{3}{8}$ millions, and the **exports** at 7 millions; of the former Great Britain supplied about seven-eighths of a million, and received a million of the latter. The **staple exports** were, at this time, cereals—wheat, barley, and maize—valued at £600,000; the **chief goods sent by us** were cotton goods valued at £700,000.

In 1880 the **population** was estimated to have increased to just over 5 millions, equivalent to 111 to the square mile, about three-fourths being engaged in agricultural pursuits.

From 1880 to 1884 the **total imports** had risen considerably, averaging $11\frac{5}{8}$ millions, and the **exports** $8\frac{1}{2}$ millions; of this trade Austria took the largest share, about half the imports and nearly a quarter of the exports. The share held by the United Kingdom was given by the Roumanian returns as $2\frac{3}{8}$ millions **imports** and $2\frac{1}{2}$ millions **exports**; but according to the English returns the imports are given as 1 million and the exports $3\frac{1}{8}$ millions.

The **staple exports** to England were, again, cereals (3 millions); and the **imports**, cotton goods and yarn (half a million), and iron (a quarter of a million).

The educated Roumanians form a class of shrewd and wealthy merchants, the heads of houses settled in London, Ibrail, and Galatz, administering a large share of the Danube trade, especially in maize; the remarkable aptitude for languages of the people of these parts,—where so many diverse tongues

are spoken,—being an unexampled qualification for commercial intercourse, in giving them polyglot powers of speech and of correspondence. The Danube is frozen up at Galatz and Ibrail through the winter and the navigation stopped. The winter loading of vessels is entirely done at the Sulina mouth of the river. Many lighters, even in summer, pass Ibrail and Galatz down-stream to load large vessels at Sulina.

30. We thus trace from this trade history that the *increase* of the population was about a third, and that trade had *increased* considerably from 1871 to 1884; the total imports rose three and a half times their value in 1871, and the exports *increased* one-fifth. *In the first term, 1870 to 1874, England held about 14 per cent. of the exports and a quarter of the imports. To preserve the same ratio in 1880 to 1884, the figures should have been, exports $1\frac{1}{4}$ millions and imports just upon 3 millions; they really were $2\frac{1}{2}$ and $2\frac{3}{8}$ millions respectively, according to the Roumanian returns, but $3\frac{1}{8}$ and 1 million by English returns,—a large and satisfactory rise in either case.* The export of cereals very largely increased, especially maize. There seems, in this little territory, hope of carrying on a very considerable trade; Roumania, in 1880 to 1884, bought from other countries three and a half times the quantity of goods she did in 1870 to 1874. This is, to say the least, a very extraordinary rise; and although England sold her more goods, these imports did not rise proportionately three and a half times!

31. SERBIA showed in 1861 a population of just over a million, or eighty-seven to the square mile.

From 1870 to 1874 the total imports and exports averaged 1 million each per annum; of this trade Austria took nearly all, Turkey and Roumania being the only other States with whom commercial intercourse was carried on. The staple export in 1874 was live animals, with a specialty in pigs.

In 1884 the population had increased to nearly 2 millions, averaging 100 to the square mile of area, only two-nineteenths, approximately, being engaged otherwise than in agriculture.

In 1884 the total imports are given as 2 millions, and the exports as $1\frac{1}{2}$ millions; Austria took about two-thirds this trade, followed by England, Germany, and Turkey. Again, the staple export was pigs, which represented 43 per cent. of the whole. It is stated that the total area is nearly 13 million acres, of which only about one-third is under cultivation, chiefly with maize and wheat.

32. From the above, we read that during these fifteen years trade rose in a remarkable way; the imports more than doubled, and the exports increased nearly 50 per cent. *At present England's share in this commerce is inconsiderable.*

Servia is an important element in the Danube trade; Austria, Roumania, Turkey, and the provinces reaping the benefit by their means of transit.

The drawback to an earlier opening of Servian trade has been the want of means of communication, especially of roads. There are here excellent openings for English activity.

G R E E C E.

Geographical position, 1—Commercial position, 1—Surface view and geographical features, 2—The inhabitants in relation to physical conditions, 2-4, 7-14—Commercial activity, 3, 4, 8-14—Centres of distribution, 5—Natural division of the country, 6—Characteristics of the trade, 8-14—Natural trade-area, 15—Mineral resources, 16—Localisation of same, 17—Agricultural resources, 18—Localisation of the chief agricultural produce, 19—Fisheries, 20—Means of intercommunication, 4, 7, 21—Trade statistics, 22—Review of the movements of trade and population from 1871 to 1881, 23—Examination questions, p. 134.

1. Greece is placed advantageously at the south of Europe; *her position for commerce is unrivalled*; she is washed by the sea on three sides, and adjoins Turkey on her land frontier in the *north*. Nearly surrounded by the sea, to the *west* she almost touches Italy, and commands the Adriatic; to the *east*, her islands bridge the space between Europe and Asia; while to the *south*, the Mediterranean gives free intercourse with Africa and the far East.

2. The aspect of this historic land is **very varied**, the higher parts and promontories being sterile, and the sea-plains hardly anywhere more than dust and uncultivated soil. In the interior, however, there are dense forests and stretches of fertile fields. The inland plains and valleys are clothed with rich pastures, and, here and there, fairly farmed; but agriculture, as an industry, is disregarded, and the produce barely sustains a poor population.

3. Greece, more, perhaps, than any other European country, exhibits commerce in its primitive state. Although not naturally a poor country, the people do not "take" to industrial

or trading pursuits, but lead by choice a semi-nomadic existence.

4. *The Greeks depend upon the sea for all means of communication, and cling, consequently, to the coasts and islands*, which are the best-cultivated parts. Even ordinary roads are lacking, conveyance of goods to and from the shore being by mere bullock-tracks or bridle-paths.

5. Here, then, the seaports are the sole distributing centres, Larissa and Pharsala being the only inland towns with even a pretension to trade, both placed on the river Selembria, with its natural gravitation to the sea; and merchandise reaches Volo, on the Gulf of Salonica, for distribution.

6. The range of mountains, running down the centre of Thessaly, divides that area into two natural divisions, *the eastern*, with Volo as the centre, and *the western*, with Arta and Missolonghi; while the *Morea* gravitates to Patras, the chief centre, and Corinth in the north; Navarino and Calamata in the south.

7. Want of energy for improving the means of transit has been the great bar to the development of trade—a defect which promises amendment. The King of Greece has promoted a railway to join Athens with Larissa in Thessaly, there to meet the European international lines, when the rail from Belgrade, *viâ* Nisso, Salonica, and Larissa, will be the future land route to the capital of Greece. These new means of communication must do much to open up the heretofore undeveloped resources of this rich district.

8. The Greeks must be clothed, and the higher classes want luxuries which the few factories are unable to supply. *Greece can hardly enter into the category of States claiming industrial activity*. Favoured, however, with a staple product in the Corinthian grape, which is in universal demand, she is enabled, with a few other earth-gifts, such as valonia (acorn-cups), olives, olive-oil, tobacco, cotton, and silk cocoons, to offer a reciprocal trade to England, France, and Turkey, exchanging her raw produce for manufactures and food stuffs.

9. The supply of lead ore from the Laurium mines is about equalled by the coal and iron imported in exchange.

10. From their defective industrial and commercial enterprise, the Greeks, as a race, must be regarded as passive; yet those who engage in mercantile pursuits are reputed to be pre-eminently keen at a bargain. Peter the Great is cynically said to have forbidden the Jews from entering Russia, because his subjects would be sure to cheat them; but a Greek reckons himself equal to three Russians. Greek merchants are omnipresent in the Black Sea, on the Danube, in the Levant, the Mediterranean, London, and every commercial capital.

11. Nature has endowed Greece with her best gifts, and only awaits man's co-operation. The quality of the produce is unsurpassed, but the spirit of enterprise as a national feature is dormant, and those exceptional and wealthy Greeks in whom survives the adventurous commercial character of ancient Greece leave their own country to settle as merchants in other centres. During the period of antiquity, Greece, which lies in the path of the extensive connections between the Black Sea, the Levant, and the countries west, was mistress of the world's commerce and colonisation. She is "Greece; but, living Greece, no more." There is no effect without a cause, and we know that the laws of causation, working through ages, have brought this bright land to its present low and unenviable condition. With a race preferring a restless and lawless life to steady labour, neither husbandry nor manufactures can flourish. There is, consequently, a minimum of capital, no wages-fund, and little wealth. Brigandage demoralises trade, the insecurity of which is a great reason for the leading citizens carrying their enterprise to better-governed shores.

12. The same causes that drive the Greek traders from home operate to prevent "outsiders" from settling in the country; since not even the initial elements of commercial activity exist, and no business under such circumstances can thrive. At the best there are but one or two coaling-stations

where English and French firms receive this commodity for the supply of calling steamers. There are many English and other capitalists who would readily settle in Greece if a fair return and security were assured.

13. Education, by teaching and training the young, imparting knowledge, and inculcating the productive virtues of industry, skill, and intelligence, is doing something towards the advancement of the well-being of the country and its material progress. This, the only "royal road" to prosperity, may yet redeem Greece, create capital, furnish wages, and encourage diligent labour; when the rich resources of the soil, rocks, and seas will be utilised, and the former aptitude of the people for commerce be again displayed.

14. Some renewal of activity is already shown in the sea navigation; the islands sharing most in this advantage, owing to their limited area, which lessens the necessity for the construction of inland communications. In fine, the reading of the map of Greece shows a country grandly placed in a favoured climatic zone, with indisputable mineral and agricultural resources, while its natural contour gives easy gravitation to the sea-board and invites a comprehensive intercourse.

15. Greece is entirely within the Mediterranean trade; its area is 25,000 square miles.

The Ionian Islands, off the west coast, are important factors in the Greek trade, as the chief source of currants. Thessaly and part of Epirus are a recent cession from Turkey.

16. The products of the mineral kingdom are not yet well known, and they are confined to alum, chrome ore, coal (lignite), galena, iron, lead, marble, stone, and salt.

17. Argentiferous lead and chrome ore are obtained from the Laurium and Calamata mines.

Coal at Marcopolo (Oro), in Attica, Kumi in Eubœa; the first is inferior, but the latter is a good, useful mineral, and available for steamers.

Galena from Thermia.

Iron from around Corinth.

Marble from the island of Paros.

18. Agriculture.—*Scientific culture would place Greece in the front rank of agricultural countries.* Among the produce are barley, cotton, citron, cherry, currant, fig, flax, hemp, haricot, honey, maize, madder, orange, olive, peas, plum, rice, rye, raisins, silk, vine, valonia, wheat, and timber.

19. Cereals are grown in most districts.

Cotton chiefly near Lake Copaii, in the plains of Argos, and in the islands.

Forests in Arcadia, Ætolia, Parnasse, &c., with naphtha, or, others say, pitch-springs in Zante.

Silk in Eubœa, Morea, and Tino.

Olives universally, but specially in the western islands.

Pasturage is scanty.

Tobacco in the valleys of Epirus, Nauplia, Epidaurus, and Thessaly; that of Larissa is noted.

The **vine**, cultivated throughout Thessaly, Morea, and the islands, yields the well-known *Corinth currants* and *raisins* shipped from Patras and the Ionian Islands, besides the wines of **Santorin**, **Tino** (Malvoisie), **Argolide**, and **Epirus**.

With the acquisition of additional territory, a large tract of fruitful soil is added to Greece.

This area lies within *the vine and olive zones*.

20. The most important **fisheries** are those for **sponges**, off the islands.

21. Local trade movements are entirely coastwise; there are no internal means of communication beyond rough roads, if we except the rail from Athens to Piræus and one or two other lines of short length.

For external and international commerce, Greece is entirely dependent on the sea, and commerce must be paralysed until good communication is given between the interior and the coast.

22. Looking at the **statistics of Greek trade and population**, we find that in 1871 the **people** numbered just upon a million

and a half, being seventy-three to the square mile; about one-half were agriculturists. Only about 10 per cent. of the whole area, it is stated, was under cultivation.

From 1870 to 1874 the total imports were given as averaging $3\frac{1}{2}$ millions annually, and the exports as 3 millions. Of these the United Kingdom held the largest share, followed by France, Turkey, Austria, and Italy. Great Britain was interested in the exports to the extent of $1\frac{1}{4}$ millions, and supplied imports to the extent of 1 million; the staple exports to us were currants ($1\frac{1}{4}$ millions), valonia (£50,000), and olive-oil (£25,000); while in return, cotton goods (five-eighths of a million) formed the chief merchandise.

In 1881 the population had risen to 2 millions, equal to eighty to the square mile; again one-half were agriculturists. From 1879 to 1883 the total imports averaged yearly $4\frac{1}{2}$ millions, and exports $2\frac{1}{2}$ millions; England's share from 1881 to 1885 averaged 2 millions per annum exported to Great Britain, and $1\frac{1}{2}$ millions imported from us. The staple exports to us were currants ($1\frac{1}{2}$ millions), olive-oil (£8000)—the average from 1882 to 1885 was £19,000—lead (£100,000), silver ore, zinc, dye-stuffs, and tan-stuffs; while inwards, cotton goods (half a million), with a few woollens and a little iron, formed the chief articles from us.

23. From this trade review, we trace that during this period population *increased* one-third. The total imports rose very nearly a third, but the exports *declined* about one-sixth. *During the first period we held rather more than half the exports and about a quarter of the imports; to maintain the same ratio in 1880-84 period, the figures should be—exports, £1,300,000, and imports, £1,150,000; they really were £2,000,000 and £1,115,000; thus exhibiting a slight rise, we, holding 25 per cent. of the imports, and nearly 80 per cent. of the exports.*

Our imports, as far as the staple is concerned, *declined*, but other merchandise was added. The staple export *increased*, and mineral products were added. As a set-off against the

rise, the acquisition of the additional territory must be taken into account.

Greece barely comes within the category of commercial States as yet, owing to the bad transit facilities; only a small portion of the country is available for assisting in the export trade. Still, with her new territory and with better transit, there is scope for a great rise.

With us Greece did an *increasing trade*; from 1870-1885 we gained about 30 per cent. on *exports*, and *just held our own* proportionately to the general rise on *imports*.

Examination Questions on the Balkan Peninsula.

1. Of what States do the Danubian principalities consist? What natural resources do they possess, and how are they placed for trade?
2. Contrast the natural advantages of Turkey with its present economic condition, and state some of the reasons for any disparity between the two.
3. Name the Turkish ports and chief markets, with their situation and staples.
4. What local and foreign competition does England meet with in the Turkish markets?
5. What is the present condition of the arts of production in Greece? What means are essential to the development of industry and trade?
6. State the economic resources of Greece, and distinguish the staple products.

RUSSIA.

Geographical position, 4, 5, 6—**Commercial position**, 1, 6, 7, 20—**Geographical features**, 1, 2, 4, 7—*Ebb and flow to natural centres*, with circulation of goods, 3, 11-15, 20—**Agricultural areas of Russia**, 8, 32—**Location of industries**, 9-10b; mining, 9, 10, 16, 26; manufacturing, 10a, 19; agricultural, 10a, 10b; fishing, 10a, 34—**Commercial activity**, 7, 11, 12, 14, 15, 19, 20, 23-26—**Centres of distribution**, 13, 13a, 16-19, 27—**Extracts from authorities on the economic and physical position of Russia**, 21, 22, 24—**Sources of supply**, 23—**Industrial activity contrasted with that of England and France**, 25, 26—*Characteristics of Russian trade*, 10, 10b, 21, 24-26, 28—**Natural trade-areas**, 29—**Mineral resources**, 30—**Localisation of the principal metals and minerals**, 31—**Agricultural resources**, 32—**Localisation of the chief agricultural produce**, 33—**Means of intercommunication**, 3, 11, 20, 35—**Trade statistics**, 36—**Review of the movements of trade and population from 1867 to 1883**, 37—**Examination questions**, p. 348.

1. Russia, representing territorially the largest empire in Europe, consists virtually of one vast plain, sweeping from the foot of the Ural Mountains to the confines of the Baltic, and extending beyond Russia, through the western States to the Atlantic shore. It is relieved only by the Valdai Hills, which nowhere exceed a thousand feet, the range of the Uwalli upland reaching to Perm and the elevated parts of Finland.

2. The exceptional uniformity of the country presents the only apparent difficulty in the reading of the map. Over such a vast expanse, with no strongly-marked natural barriers, it is not at first easy to trace the ebb and flow of merchandise, or the principle of the supplementary system of railways, since these lines can be laid in any direction without meeting an obstruction.

3. **St. Petersburg** joins with **Finland** and **North Sweden**; with **Berlin** and all **Germany**; with **Poland**, **Austro-Hungary**, **Turkey**, and the independent States; with the **trans-Caucasus** and **Asia Minor**; by the **trans-Caspian**, *via* the **Oxus**, with **Samarcand**; and in the **North Urals**, **Russia** joins with **Ekaterineburg** and **Tyumen** from **Perm**. Arrangements are also in progress to extend this **Ekaterineburg-Tyumen** line to **Vladivostock** on the **China Seas**, and on the **European** side from **Perm** to **St. Petersburg** or **Moscow**—all on **Russian** territory.

4. The **European Empire** is bordered by four seas, the **Arctic**, **Baltic**—with the **Gulfs** of **Finland** and **Bothnia**—the **Black Sea**—with the **Sea of Azov**—and the **Caspian Sea**. Throughout the plain sluggish rivers run their placid courses, and being united by canals on the more elevated lands, establish water communication from one sea to another, unrivalled by any other country.

Of the rivers, four flow northwards, and discharge their waters into the **Arctic Ocean**; three, or, with the **Vistula**, four, flow westwards to the **Baltic Sea**; four, again, discharge their waters into the **Black Sea**, and two into the **Caspian**. Of these last, the **Volga** turns its course from the centres of the west towards the passive States of the **Old World**, exactly as with the **Danube**.

5. The **Ural Mountains** separate **European** from **Asiatic Russia**, the **Caucasus** dividing the empire from **Asia Minor**; but on the west and south-west, where she adjoins **Sweden**, **Germany**, **Galicia**, **Roumania**, and **Turkey**, the demarcations are only political.

6. Mistress of the **Caspian** and the defiles of the **Urals** and the **Caucasus**, she attracts all the overland commerce between **Europe** and **Asia**. In **Europe** she possesses ports on the **Arctic Ocean**; by the **Baltic** she reaches the **Atlantic** and all maritime **Europe**, both north and west; by the **Black Sea** she communicates directly with the **Mediterranean**, and has thus open transit both with east and west; while by land she is in communication with all **Europe**, by road, rail, and canal.

7. Her immense size, her steppes, the climate,—which, owing to the many degrees of latitude, ranges from the temperate and warm temperate in the south-east to the Arctic in the north,—and the want of roads, have hitherto presented obstacles to overland commerce, but these are in course of being surmounted. The maritime trade on all the seas but the Caspian is hindered in winter by the ice.

8. To read the map successfully we must divide the country into areas, and follow the ebb and flow, that is, the gravitation of merchandise by the position of the centres.

Agriculturally, Russia is divided into three zones:—(a.) Between the Arctic Sea and the Urals, extending to the Uwalli range, is the polar region, covered with “**Tundra**,” south of the Tundra come vast forests of pine, fir, and birch; in the centre of this zone the land becomes cultivable. (b.) **Central Russia**, the fertile “black soil” plain, alternating with forests. (c.) The **south and south-east plains**, entirely formed of steppes, i.e., of uniform plateaux, absolutely level. The river Don divides these steppes.

9. *The Ural Mountains and elevated parts of Finland are the only parts of the empire with large resources of minerals and metals, except the valley of the Donetz, reaching nearly to Moscow, which is rich in iron and coal.*

10. These divisions indicate the zones in which the largest number of industrial circles and centres will occur. **Mining and its attendant arts** will probably occupy the population stretching along the Urals, south of the inhospitable regions, say 60° N.; Finland, too, may attract some miners.

a. The central parts will be the **manufacturing** districts, stretching along the Don, being close to fuel and easily accessible for raw material; while the rest of Russia will be purely **agricultural**, with **fishing** in the seas, rivers, and lakes.

b. With the chief industries, those relating to the soil, one cannot expect many large towns except in the central or industrial zone, as the map confirms.

11. **By the aid of railways and canals, the internal ebb and**

flow of Russian commerce is maintained. External trade can only flow by one of the seas, which, excepting the Caspian, are closed for part of the year; or, internationally, over the western frontiers, which present no obstacles; or over the Eastern Urals, now traversed by the "iron road," or south by the river Ural, as well as by the old caravan roads, which are still frequented.

12. Tracing the zones, we see that the first naturally *gravitates* to the Arctic Ocean, but the "season" is very restricted. Regions two and three have natural gravitations to the Black Sea, but by the railways it is easy to distribute against the river-flow and join the basins of the southward rivers with the basins of those going west, and thus find an exit *vid* the Baltic.

13. In region one, Archangel is the great distributing *centre* for all the northern empire except Finland, which gravitates to the ports on the Gulfs of Bothnia and Finland, namely, Tornea, Uleaborg, Wasa, Bjorneborg, Abo, Helsingfors, and Viborg, with St. Petersburg as the great central emporium.

a. Region two *gravitates* to St. Petersburg, with its new deep-water docks, Cronstadt, and the ports on the Baltic, Reval, Riga, and Libau; or south to Odessa, Nicolaieff, Sevastopol, Taganrog, Rostov, and Azov.

b. Region three gravitates to the same ports on the Black Sea and Azov, whilst the trans-Caucasus utilises Batoum and Poti.

14. A Russian correspondent reports that the Imperial Government has decided upon constructing a port at Novorossisk in connection with the scheme of railway extension in Cis-Caucasia:—"The new port, affording outlet for the export trade of the south-eastern provinces, cannot but affect the commerce of Rostov and Taganrog; and upon the construction of the railway from Vladikavkaz to Petrovsk, on the Caspian, the line to Novorossisk will drain the greater portion of Cis-Caucasia of its cereals, and give a great incentive to agriculture throughout this fertile region."

15. For interchange with Asia, the valley of the Volga is the great waterway, *vid* Astracan and the Caspian; overland

by Orenburg or Perm; the latter route draws all the China commerce which comes to St. Petersburg and Moscow by Ekaterineburg.

16. Poland uses the Vistula, and thus unites its commerce with that of East Prussia; while, in the south-west, Galicia and Roumania go hand-in-hand in natural gravitation with Volhynia, Podolia, and Bessarabia, *viâ* the Dniester.

17. On the eastern frontier, Perm and Ekaterineburg are the great centres both of mining and transit; followed by Orenburg in the south as an important entrepôt.

18. On the west, Warsaw, Kovno, Lublin, Kamenetz, and Kichinev are important centres; in the south-west produce gravitates to Galatz in Roumania, as well as to Odessa.

19. Inland, the industrial circles on the *mining fields* embrace Moscow, Tula (the Birmingham of Russia), Kalouga, Smolensk, Riazan, Orel, &c.; while Nijnii-Novgorod, on the Volga, nearly in the centre of Russia, is the most important market in the empire; indeed, the fair of this place, which lasts two months from July 1st, is the most extensive in the world; merchants from all quarters of the globe attend, and much of the ebb and flow of merchandise for the next season is here decided.

20. *The unchanging level of Russia renders it possible to communicate east, west, north, and south by water or by land, the distribution being governed by the destination of the goods.*

21. "Most of the articles used by the peasants," says Mr. Mackay, "are made in the villages, each of which is usually devoted to a single branch of industry. . . . Indigo, dye-stuffs, and colonial produce are mostly transported by overland route from China." Though the empire is a world in itself and might be self-sustaining, the advantages are recognised of foreign commerce, which is considerable, yet as nothing to the undeveloped and exhaustless resources of the three natural kingdoms.

22. Mr. Casartelli divides Russia into six regions:—

(a.) The forest region of the north, traversed by the river

Dwina, with the great port of **Archangel** at its mouth ; just south of this region is the only manufacturing town of the north, the capital, **St. Petersburg**, communicating with the Gulf of Finland.

(b.) **The western region**, essentially agricultural, but possessing some important manufactures. **Warsaw** is the chief centre ; gravitation to the Baltic.

(c.) **The central manufacturing region**, with **Moscow** as a centre. It also includes **Tula**, the centre of the iron and coal fields, and the important town of **Nijni-Novgorod** ; gravitation in any direction.

(d.) **The cereal region**, south of the preceding, gravitating to **Odessa** and the Black Sea.

(e.) **The steppes**, purely pastoral, with **Astracan** and **Taganrog** as centres ; gravitating to the Black Sea and Caspian.

(f.) **The metal region** of the Urals, to the east, with **Perm** as a centre, and gravitating in any direction.

M. Bainier similarly classifies the industrial life.

23. **The textile industries** embrace cotton, wool, hemp, flax, and silks. *Hemp* and *flax* are grown sufficiently to supply the manufacturing requirements. Much *wool* is obtained from the flocks feeding on the pastures of the steppes. *Cotton* and *silks* come by the caravans from Persia and the East ; the former also over-sea from the American cotton ports to **Reval** or **Sevastopol**, and then distributed to the centres round **Moscow**.

24. The same writer gives an interesting account of the industries of Russia :—"Russia, so rich in raw materials and in immense forests, but with routes and means of transport so defective, an absence of liberty, and no guarantee for private interests, has a system of commercial caste which stops industrial progress, and debases it to an inferior and humiliating position. Russia is, however, 'transforming itself' in these particulars, and, of late, industry has made great progress."

25. **Industrial activity** does not, as in **England** or **France**, concentrate in great cities, but disseminates in small towns and villages ; large manufactures are the exception, although

the tendency is to increase. Two great obstacles oppose the development of Russian industry; one is, that the Russian workman only works for six months, or rather only binds himself for this period. During the summer season he works *the field harvest*, and during the winter he betakes himself to *the town harvest*; and therefore, as a second cause, the efficiency of the man as a workman is a divided one, and it is impossible that such a division of labour can be successful.

26. **Metallurgic industry is more backward than that of textiles.** The high price of fuel in the region of Moscow and difficulty of transport were formerly almost insuperable; but now that coal is more extensively mined in the sub-Moscow region, an important improvement is manifested.

27. Among international entrepôts, Warsaw is a great centre for interchange between Russia and Central Europe. Rybinsk acts as an important entrepôt between Central Russia, the south-east, and the northern Baltic ports, movements being effected by the Volga, its tributaries, and the canals. Moscow is the great industrial centre of the empire, and the principal seat of trade between Europe and Asia.

Nijni-Novgorod has already been mentioned. Vologda is a centre between St. Petersburg, Perm, and Siberia; also between Central Russia and Archangel. Kharkov acts between Moscow and the Black Sea ports, and Kazan between Central and Southern Russia and Siberia.

28. Excepting skins, silks, and caravan teas, which come in direct by Siberia, or by the Caspian and Astracan routes, Russia purchases her food-produce and raw materials chiefly from other European centres, instead of going to the countries that supply them first-hand.

29. Russia and Finland play important parts in European trade, contributing in the north to the "White Sea trade," in the south to the "Black Sea trade," in the west central to the "intermediate zone," and in the north-west to the "Baltic trade;" there is also considerable local trade with Asia and the East by the Ural Mountains and the Caspian Sea, thus

connecting "North and Central Asian trade" with European trade.

The area of Russia is 2,095,504 square miles, of which about 26 per cent. is arable, 19 per cent. waste, and 38 per cent. forest.

30. Russia is rich in mineral resources in the south-west of Poland, on the Asiatic side of the Urals, and in the valleys of the Don, Donetz, &c.

Among others are found alum, amber, bog-iron, building-stone, chalk, clays, coal, copper, freestone, granite, graphite, greenstone, gold, iridium, iron, jasper, kaolin, lead, lime, limestone, marble, meerschaum, magnesian limestone, peat, platinum, petroleum, porphyry, potters' clay, rock-salt, salines, sandstone, silver, slate, syenite, serpentine, saltpetre, sulphur, vitriol, &c., with precious stones and mica plates.

31. Coal.—"It would seem that Russia was like Ireland, where the development of the Carboniferous system was confined to the lowest strata, and mountain limestone far more represented than coal. The upper strata, which alone contain the true coal-measures, are not decidedly represented in Russia."¹

The great centre of the coal production is the valley of the Donetz, with that of the Don, where some good anthracite is mined. A large bed of inferior coal extends from the White Sea to Kalouga in the heart of Russia, and traverses Novgorod, Tver, Smolensk, Moscow, and Tula. Coal is also worked in the Perm circle, and indifferent coal near Derbent and in parts of Poland.

Copper, chiefly in the Urals,—Perm, Orenburg, and Ufa; in the latter government there are 1758 mines, but owing to the growing scarcity of charcoal—the only available fuel—twenty-eight alone are worked.

Lead and silver in the Caucasus.

Iron, chiefly in the Urals; also Finland, valley of the Donetz, Poland, &c. Ekaterineburg, Perm, and Tula are centres. Iron is the only metal of importance in Finland.

¹ Blackie.

Platinum in the Urals, at Nijnii, Taghilsk, and Goroblagodat district.

Petroleum in Kertch, Taman, Apcheron, Mezene, and extensively in the Caspian districts, finding outlets at Batoum and Poti.

Salt largely in the salines of Perm and Orenburg governments, on the shores of the Black Sea, Sea of Azov, and the Volga.

32. Russia can be divided into six agricultural zones, looking from north to south :—(a) The glacial region, covered with "Tundra ;" (b) the forest region ; (c) the industrial ; (d) the agricultural ; (e) the pastoral ; (f) the trans-Caucasus.

Region 1 extends along the shores of the Northern Sea to the latitude of Onega, approximately 64° N. This represents the "White Sea trade."

Region 2 covers from about 64° to 56° N., and yields oats, barley, and rye ; immense forests of various woods, alder, birch, fir, and larch in the north, oak not above 61° ; fruit-trees stop at 56°, and their regular culture at 53° ; and flax of excellent quality in the west, with outlet at Riga. This represents both the "White Sea" and "Baltic trade" areas, but the latter more especially.

Region 3 covers from 56° to about 53° N, bounded on the east by the Dnieper, west by the Urals, north by a line through Smolensk, Tver, Rybinsk to the mountains, and south by a line from Tchernigov through Tula, Kazan, and Ufa to the Urals. Moscow is the chief industrial centre, Nijnii-Novgorod the chief market, and Tula the mining and iron-working centre of this district. This region sends mainly *via* the Baltic, but is easily available for the Black Sea or intermediate zone.

Region 4 covers the "black soil," a "fruitful land," lying between the Pruth and Ural rivers, from the southern line of Region 3 to another through Kichenau, Ekaterinoslav, Mariupol, Rostov, Saratow, and Orenburg, and growing much excellent wheat. This represents a portion of the "Black Sea trade."

Region 5 covers the "steppes," and lies south of the southern line of Region 4 to the Black Sea and the Caucasus chain; it possesses abundant pasturages, covered with flocks and herds, whence come the wool, tallow, hides, &c., of the Black Sea trade. This region also represents a "Black Sea trade" area.

Region 6 lies beyond the Caucasus, is very warm, and produces fruits, &c., unknown to the rest of Russia. This district forms part of the southern area or eastern end of the "Black Sea trade."

The agricultural resources of Russia comprise barley, beans, beetroot, colza, flax, hemp, hops, millet, madder, maize, oats, pastures, tallow, tobacco, wheat, wool, and wood; with, in the south, cotton, honey, liquorice, raisins, rice, silk, pistachionuts, sesame, vine, &c.

38. Beetroot is extensively cultivated in Podolia, Volhynia, Kiev, Tchernigov, Poltava, Kursk, Orel, Tula, Tambov, Voronej, and parts of Poland.

Flax in three great districts, chiefly—(a) in the region between the Gulf of Finland and the Niemen—this includes Courland and Livonia,—of this district Riga is the principal seaport outlet; (b) in the basin of the Vodla, an affluent of Lake Ladoga, the basin of the Volga in Jaroslav and Kostroma, and in the basin of the Sukhona in Vologda; and (c) between the Dniester and Don rivers,—this flax is more used for the linseed and oil than for the fibre.

Hemp—(a) in the governments of Kursk, Orel, Tula, Kalouga, Riazan, and Tambov, exporting by St. Petersburg; and (b) in Vitebsk, Smolensk, Mohilev, Tchernigov, Kovno, and Vilna, exporting *via* Riga.

Maize in Bessarabia, chiefly exported from Odessa.

Oats occupy the north, and especially the alluvial tracts about Archangel, and, in conjunction with barley, some parts of Central Russia.

Rye, principally in the Moscow region, and generally up to 67° N.

Tobacco in Tchernigov, Saratow, Poltava, Podolia, and the south.

Vine in Bessarabia, the districts between the Bug and Dnieper rivers, the Crimea, on the banks of the Don, the Volga, in Astracan, Don Cossacks, Kizlar, &c. Central Taurida yields the best product, while the wines of Kizlar are much esteemed.

Wheat is the chief cereal, and is grown in three principal districts:—(a) Poland, Podolia, Volhynia; (b) the “black soil” region; and (c) a portion of the steppes between the rivers Pruth and Don.

34. Fishing is an important industry on the Baltic and Black Seas, and in the lakes and rivers—especially for sturgeon.

35. Local Trade Movements.—Russia is favourably placed commercially, having three extensive sea-boards, exclusive of the Caspian, with excellent harbours on the north, north-west, west, and south, besides an admirable system of canals, styled the “*Maria system*,” uniting each sea with the others; rivers of great length and slow current; and a system of **national and international railways**, which on January 1, 1887, reached a total length of 16,249 miles in Russia, 748½ in Finland, and 161 in the Caucasus.

The projected ship-canal to connect the Volga with the Don will extend commerce and give a great impetus to the industries of Rostov and the Donetz basin.

Russia further attracts nearly all the commercial movements of Siberia, and much of Southern Asia and China, *viâ* the defiles of the Ural Mountains. *Perm promises to be a future centre of railway communication*, being already in connection with Ekaterineburg, from which town a great trunk-line is pressing forward across the Asiatic continent to the port of Vladivostock on the China Sea. Perm, further connected with existing Russian lines, will complete a system of uninterrupted railway communication from the western shores of Europe to the eastern shores of Asia.

The map defines all the "natural" exits for the various areas, districts, or regions.

36. From statistics, we gather that, in 1867, the population in European Russia was about 63 $\frac{3}{8}$ millions; of Finland, 1 $\frac{7}{8}$; of Poland and the Caucasus, 10 $\frac{3}{8}$; and of Asiatic Russia, 6 $\frac{1}{4}$ millions; or a total of 82 $\frac{1}{4}$ millions over the whole empire.

From 1870 to 1874 the total imports, calculated at seven roubles to the pound, averaged annually 62 $\frac{3}{4}$ and the exports 49 $\frac{5}{10}$ millions sterling. English trade was interested in these exports to the extent of 21 $\frac{3}{4}$ and in the imports 7 $\frac{1}{2}$ millions. Testing these movements by the two sea-boards, we find that the exports from the northern ports averaged 13 $\frac{1}{2}$ millions a year, with a rising tendency; and from the southern ports, 8 $\frac{3}{8}$ millions, with a falling tendency. The imports to both coasts fluctuated but little.

The staple exports to England were wheat (10 millions), flax (3 $\frac{1}{2}$ millions), wood (4 $\frac{3}{8}$ millions), linseed, &c. (3 $\frac{1}{4}$ millions), and hemp (five-eighths of a million); the imports were iron (3 $\frac{1}{4}$ millions), cotton goods (1 $\frac{3}{8}$ millions), and woollens (just over three-quarters of a million).

In 1883 the population had risen to about 87 $\frac{7}{8}$ millions in Europe, and 15 $\frac{7}{8}$ in Asia, or a total of 103 $\frac{3}{4}$ millions over the whole empire.

From 1880 to 1884 the total yearly imports averaged 56 $\frac{3}{4}$ and the exports 57 $\frac{3}{4}$ millions. Great Britain took of the exports about 19 millions—12,000,000 from the northern and 7,000,000 from the southern ports—and supplied imports to the extent of 5 millions, being 4 $\frac{1}{4}$ to the northern and seven-eighths of a million to the southern ports. The staple exports to us were grain and flour (8 $\frac{3}{4}$ millions), flax (2 millions), wood (3 millions), seeds (half a million), hemp (£400,000), and wool (1 million); the imports from us,—iron (£600,000), cotton goods and yarn (half a million), woollens (one-fourth of a million), coal (£600,000), and machinery (three-fourths of a million).

37. We are thus able to draw conclusions that the popula-

tion of the whole empire *increased* one-fourth from 1867-1883. The total imports *declined* 10 per cent., and exports *increased* about 16 per cent. *English trade from 1870-74 took 12 per cent. of the imports, or rather better, and nearly 45 per cent. of the exports. In the same ratio for the average of years 1880-84 the figures should have been £6,800,000 imports and £26,000,000 exports; but in reality they were £5,000,000 and £19,000,000, showing a heavy fall. Thus, in the 1880-84 period, we held only some 9 per cent. of the imports and 33 per cent. of the exports.*

Trade fluctuates owing to "harvest" requirements. There are many millions of acres available for fine cereal and other crops, and also grand pasturages.

From 1870-1885 *we lost* some 3 per cent. on *imports* and 12 per cent. on *exports*. Russian trade in the total *declined* 10 per cent. on imports, and *rose* 16 per cent. on exports. While imports from foreign countries are handicapped by hostile tariffs to protect home industries,—although Russia is one of the finest countries in the world for all commercial products,—commerce will be at a comparative standstill; for nations, as individuals, do not care to deal with nations without reciprocity.

A Foreign Office report states that in 1886 more than one-third of the European-Russian imports came from Germany, and nearly 30 per cent. from Great Britain. Of manufactured goods Germany supplied £3,322,000; England, £1,782,000; Austria, £590,000; France, £269,000. The total imports in 1884 were £44,200,000; in 1885, about £34,527,000; in 1886, £34,800,000. The slight rise over 1885 is due to heavy importations previous to the end of the year to avoid the anticipated increase in Customs duties.

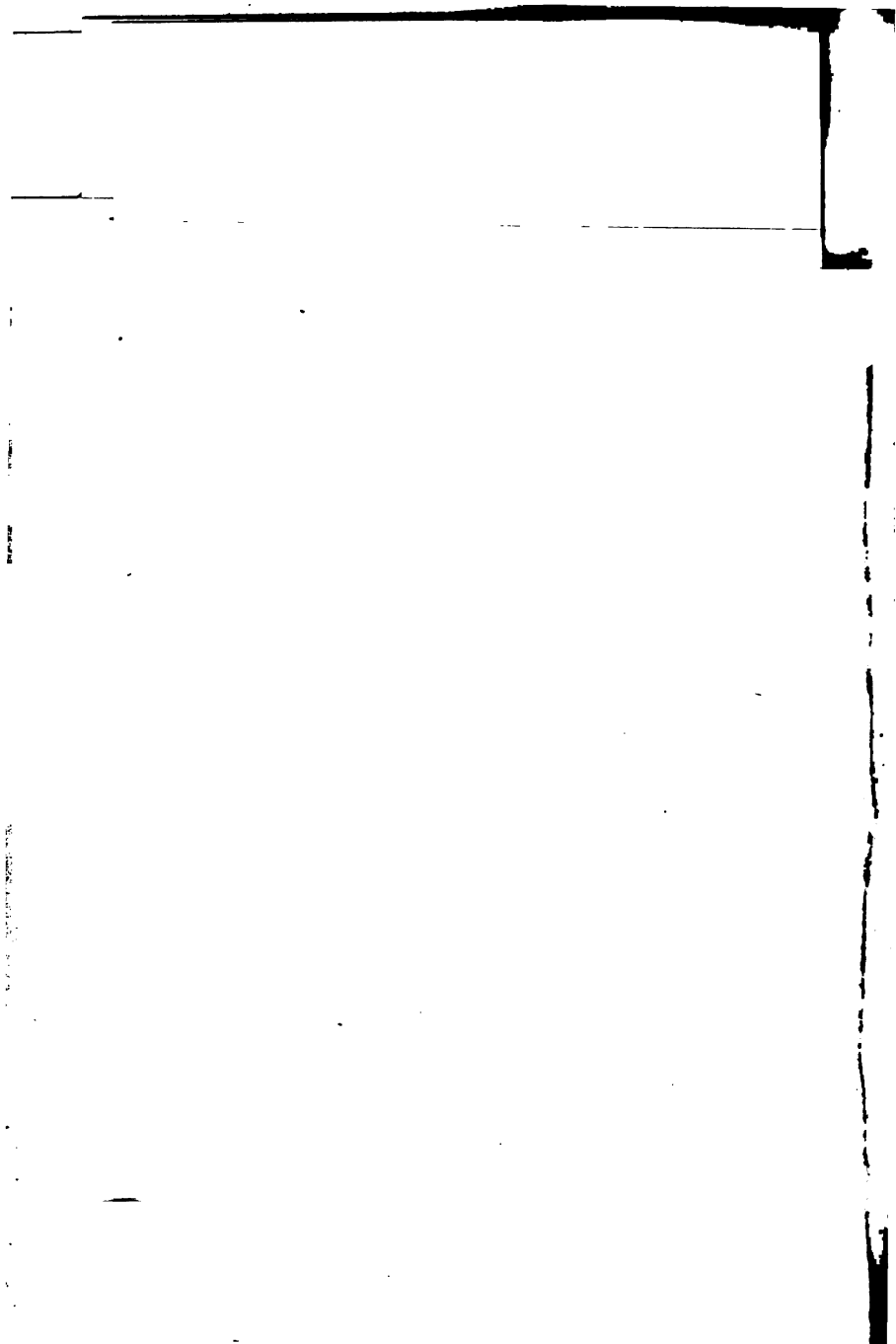
Examination Questions on Russia.

1. Give the boundaries and the most prominent physical characteristics of Russia, and indicate how they influence commercial intercourse favourably or unfavourably.
2. Describe the system of Russian waterways, and the methods which have been adopted for uniting and completing the various means of transit.
3. Divide European Russia into its agricultural zones, and show how they determine the local industries.
4. What minerals and metals occur in Russia, and in what localities?
5. Enumerate the ports; detail the staples of the trade of each. Give an analysis of the "commercial movements" on each boundary sea.
6. What are the principal imports of Russia? Whence are they derived mainly, and at what centres are they received?

ISLES EXCLUDED).

<p>AT</p> <p>is</p> <p><i>Altpetre-beds</i></p> <p>Go</p> <p>Ar.</p> <p>A</p>	<p>A. <i>Woollen goods</i> (Moravia), leather.</p>
<p>bei</p>	<p>...</p>
<p>le(e), pottery,</p> <p>ro</p> <p>st, <i>bonbons</i>,</p>	<p>A. <i>Woollen goods</i> (north), <i>silk goods</i> (south), <i>lace</i>, <i>ribbons</i>, <i>gloves</i>, <i>shoes</i>, <i>dresses</i>, <i>wigs</i>.</p>
<p>(<i>Dresden</i>);</p> <p>icals, salt-</p> <p>te</p> <p>(<i>Wuns</i>); <i>book</i></p> <p>)ing.</p>	<p>A. <i>Woollen</i> and <i>silk goods</i> (Saxony and Silesia).</p>
<p>re, pottery,</p>	<p>A. <i>Turkey carpets</i>, spun silks, <i>Morocco leather</i>, <i>sandals</i>, <i>tanned skins</i>, <i>sponges</i>, <i>corals</i>.</p>
<p>gunpowder</p> <p>ious stones</p> <p>od</p> <p>lt</p>	<p>A. <i>Morocco leather</i> (east).</p>
<p>m</p> <p>ou</p> <p>t,</p> <p><i>polica-ware</i>,</p>	<p>A. <i>Silk goods</i>, spun silks, <i>straw-plaits</i>, <i>coral</i>, <i>imitation cameos</i>.</p>
<p>ime (centre).</p>	
<p>h, tar, tur-</p> <p>esin.</p>	<p><i>Timber and deals</i>, — <i>pine</i>, <i>larch</i>, <i>fir</i>, <i>oak</i>, — <i>tartar</i> <i>lichen</i>.</p>
<p>nt, and lin-</p> <p>urpentine.</p>	<p><i>Timber</i>, — <i>pine</i>, <i>fir</i>, <i>beech</i>, &c.</p>
<p>ESINS.</p>	<p>BUILDING-WOODS AND DYES.</p>
	<p>TANNING AND TEXTILE.</p>

[To follow p. 148.



ASIA.

TURKEY IN ASIA.

Geographical position, 1, 2—**Commercial position**, 1, 2, 2a, 13—**Geographical features**, 1, 3a, 3b, 3d, 4, 6, 10—The three districts of Asiatic Turkey, 3-6; their features, 3a, 3b, 3d, 4, 5, 6; and climate, 3c—The zones of Mesopotamia, 5—The Syrian desert, 6—The climatic zones of Syria, 7; soil, 8; harbours, 9—Rivers and streams of Asiatic Turkey, 10, 10a—The mountain-ranges in relation to resources, 11—The people, 12—**Commercial activity**, 12, 14-16—*Ebb and flow to and from natural centres*, with circulation of goods, 17-19—Centres and industries, 17-20—*Characteristics of this trade*, 21—**Natural trade-areas**, 22—**Mineral resources**, 23—**Agricultural resources**, 24—Localisation of characteristic agricultural produce, 24—Means of intercommunication, 14, 25—**Trade statistics** cannot be given, 26—**Examination questions**, p. 155.

1. Turkey in Asia is an Asiatic territory, nearest to the western nations of Europe, and in the direct way of the maritime commerce from the Mediterranean or Suez Canal to the Black Sea. The country has a very extensive sea-board, and includes the divisions of Asia Minor, Armenia, Syria, and Mesopotamia. It is washed on the north by the Black Sea, on the west by the Sea of Marmora, the Archipelago, Mediterranean, and Levant; and in the extreme south-east by the Persian Gulf: again, on the east it is in close correspondence with the Caspian.

2. The land frontiers are not so extensive, but the whole district is, as it were, the connecting link between the three continents of Europe, Asia, and Africa. Being itself in Asia, it joins Europe at the Caucasus, besides being scarcely

divided from the same continent at the Bosphorus and Dardanelles; it abuts on Persia, joins Arabia over the Syrian desert, and is linked with Africa in the south-west by the Isthmus of Suez.

a. The whole territory, in effect, is the central point between eastern and western commerce; all traffic viâ the Suez Canal runs close by its shores; and, in any extension of an "over-land route" to India and the East generally, it must play a very important part.

3. This area consists of three distinct districts, each one economically different. They are—(a) **Armenia and Asia Minor**; (b) **Mesopotamia**, or the country of the Euphrates and Tigris; and (c) **Syria**.

a. Armenia is an elevated tableland, lying to the east of Asia Minor, alternating with valleys and plains; containing a fertile corn country, with good pastures, and rejoicing in a cool climate. It is separated from the Black Sea by a triple range of mountains well clothed with forests.

b. Asia Minor extends westward from Armenia to the Archipelago, and is traversed by two defined mountain-ranges, one, the Taurus, running parallel to the Mediterranean, and sending out many lateral branches, with well-watered and fertile valleys; while the second extends into the interior in a south-westerly direction. The central part, surrounded by these mountains, forms a series of elevated tablelands, nearly bare of trees, but abounding in pastures, on which graze the sheep and goats yielding the valued **Angora wool**.

The whole of Asia Minor may thus be termed alternate plains of excellent pasturages, interspersed with fertile valleys and rugged mountain-tops. Some parts of the tableland are arid and waste.

c. The climate varies from excessive heat in the lowlands to great cold on the Armenian heights.

d. The coasts are rugged, and present *fine natural harbours*, so that no difficulty occurs in any movements of the mercantile marine.

4. **Region two**, the south-east of the empire, is bounded on the north by the Armenian and Taurus Mountains; on the east by the high lands, separating it from the tablelands of Persia; on the west and south-west by the Syrian and Arabian deserts; and on the south-east by the Persian Gulf.

5. **Assyria or Mesopotamia** may be divided into three *zones*—(a) the hilly and mountainous country of South Taurus, a land of forest, olive, wine, corn, and pastures; (b) the plains of Mesopotamia and East Tigris, of sedimentary formation, a land of mulberry, cotton, orange, maize, and tobacco; and (c) the alluvial plains of Babylon and Chaldea, a land of irrigating canals, yielding dates, rice, grass, sedges, and rushes.

6. **Syria** and the Syrian desert extend from the Levant to Mesopotamia; the latter consists generally of a fine, black soil covered with herbage.

7. Syria proper has three distinct climates, which have corresponding effects on produce—(a) Lebanon, cold; (b) the low sea-coast, heat and moisture; and (c) the east lowlands, dry and scorching heat.

8. The soil is fertile, especially in the second zone; and were nature assisted by art, there might be brought together, within a distance of fifty miles, the vegetable treasures of most distant countries.

9. The harbours on the Syrian coast are not good, and vessels have, as a rule, to lie off shore.

10. The rivers and streams of Asiatic Turkey are numerous, some flowing northwards into the Black Sea, some westward to the Sea of Marmora and Archipelago, and some southward to the Mediterranean; but for commercial purposes none of these are much used. The Syrian coast has no commercial river.

a. In the east and south-east, however, we have two rivers of long course, flowing in the opposite direction, to the Persian Gulf—namely, the Euphrates and Tigris, rivers long connected with commercial history, and destined to play important

parts in the future, when this country, so long lying passive, wakes up to its old glory, and not only distributes its own treasures, but takes a very active share in the transit business between East and West.

11. *All the mountains contain minerals; but labour is required in order to profit from the abundance of mineral and vegetable earth-gifts appertaining to these passive countries.*

12. There is no natural trade proper, as commerce is carried on by strangers, especially by the Greeks. The **Armenians** are, however, largely devoted to *manufactures and commerce*, but as a rule the **Syrian people** are addicted to a *pastoral and agricultural* life.

13. Thus all four quarters of the globe are in direct communication with this large district by sea, while her land frontiers attract the major part of the merchandise passing from Lower Asia to Europe.

14. **Asia Minor** is still traversed by the caravan routes of old; but want of even this means of communication is sorely felt on the alluvial flats of the south-east. When the projected railways of the country are extended, joining Constantinople and the western seas with the Persian Gulf, an entire revolution in commercial transactions between East and West seems probable.

15. There appears to be scope here, if unfettered by rulers, for modern improvements. At present these regions touch two or three trade-areas, but with the immense natural resources of the territory, the question only of "destination" would arise, if there were better communications.

16. Asiatic Turkey hardly enters into "trade returns," as far as England is concerned, though *there is no better field in the world for intelligent trade or industry.*

17. Here, as elsewhere, goods gravitate to the seaports. Those of **Mesopotamia**, following the rivers, find a distributing and *gravitating centre* in **Bussorah**; **Syria** has several small centres for small local circles, as **Alexandretta**, **Latakia**, **Tripoli**, **Beyrout**, **Acre**, and **Jaffa**.

18. **South Asia Minor** *gravitates* on the east to **Alexandretta**, and on the west to **Smyrna**, which is the greatest centre, emporium, and entrepôt, to which the caravan routes converge, and from which the railway is extending.

19. **North Asia Minor** has several small centres, notably **Scutari**, for goods to Europe *viâ* Constantinople; **Erekli**, **Sinope**, **Samsoun**, the natural gravitating point for Sivas, and, close to the rivers **Kizil-Irmak** and **Teshil-Irmak**, **Trebizond** for the **Erzeroum** district, and **Batoum** or **Poti** for **Tiflis** and the **Trans-Caucasus**. *Trebizond stands as the central point for the Black Sea commerce.*

20. **Inland caravan depôts**, as the map indicates, are numerous, as, for example, **Kutaya**, **Koniyeh**, **Angora**, **Erzeroum**, **Tiflis**, **Erivan**, **Mosul**, and **Bagdad**.

21. Some special manufactures find a wide market, amongst them being Turkey carpets, shawls, steelwork, and attar of roses. Commercial transactions are, however, mainly raw materials, valued in, and exchanged for, English manufactured goods.

With such mineral and agricultural resources and excellent commercial position, what remains to bring these countries forward are skilful, intelligent, and persistent industry, not characteristic of the Turks, and better facilities for transit and distribution.

22. **The Turkish dominion in Asia**,—Asia Minor, Syria, and Mesopotamia,—forms part of three trades; the northern part of Asia Minor, from a line drawn from Smyrna to Lake Van, forms an area of the "**Black Sea**" trade; the southern part with Syria,—all the country washed by the waters of the Levant,—forms the "**Levant**" trade; while the south and south-eastern parts of Mesopotamia help to constitute the "**Persian Gulf**" trade.

This district lies in the warm temperate and sub-tropical zones; that is, the region of *maize*, *cotton*, and *palms*.

23. **The mineral resources**, more particularly of Asia Minor, are reported to consist of alabaster, alum, copper, amber,

asphalt, bitumen, coal, gold, honestones, iron and ironstones; also, in Syria, lead, loadstones, magnetic iron, jet, meerschäum, gypsum, marble, nitre, petroleum, slate, salt, sulphur, silver, soda, and stone; also, in the islands, are found asbestos, copper, lead, limestone, marble, ochre, silver, salt, talc, umber, &c.

The minerals and metals are, however, so little worked that it is impossible to place a centre of mining industry in any one part.

24. Agriculture is the *staple industry*, and the produce most varied, ranging through so many climatic zones,—the temperature alters considerably at the various altitudes,—produce consists of barley, carob beans, colocynth, cochineal, cotton, dye-stuffs, drugs, essences, flax, fruits, figs, galls, gums, hemp, honey, indigo, linseed, liquorice, madder, millet, mulberry, maize, oranges, olive, olive-oil, opium, pastures, rice, raisins, roses for attar, sugar, seeds, shumac, shipbuilding wood, sesame, silk, tobacco, the vine, valonia, wax, woods and wheat, yellow berries, and zedoary seeds.

Opium (poppy), roses for the manufacture of the famous attar of roses, and tobacco are cultivated with much success and in great perfection in many parts of this area. Afium Kara Hissar for opium, Smyrna district for roses, and Latakeiyeh for tobacco are noted centres.

Madder, for supplying the Adrianople red dye, is largely grown in the western districts.

Pastures round Angora nourish fine flocks.

Beyond these, the cultivation of cereals, fibres, and fruits is general.

25. Local Trade Movements.—Although railways are being promoted, Asia Minor still preserves the old caravan routes. The "Euphrates Valley Line" would materially develop this fruitful region. Smyrna is an emporium for all merchandise, both of import and export. Regular lines of steamers trade between England and the Continent, the Mediterranean, Adriatic, and Black Seas, calling at Smyrna, as also at the various ports north and south. Constantinople, too, acts as an

emporium; goods, coming by caravan to Scutari, being either stored or ferried across the Bosphorus.

26. Trade returns are not issued, and no summary can be given of the commercial activity; but from the number of ships and steamers in and out of Smyrna and other ports, trade must be considerable and increasing, and an expansive opening here awaits mercantile enterprise.

Examination Questions on Turkey in Asia.

1. Define those provinces of Armenia, Mesopotamia, and Syria which constitute Turkey in Asia, and contrast their commercial significance.
2. State generally the productive resources of Asiatic Turkey, and name the seaports to which merchandise gravitates.
3. What is the present industrial and commercial condition of this country, and what course seems essential to its improvement?
4. Give particulars of "local trade movements."
5. What is the Levant trade? Give the staples of commerce.
6. What might be the effect upon the Levant trade of the prospective Euphrates railway?

ARABIA.

Geographical position, 1—Physical aspect, 1, 2, 3—Commercial activity, 3, 5, 7—Climate, 4; the people, 4—Centres of distribution, 6—Characteristics of this trade, 5, 7—Natural trade-area, 8—Arabian trade returns not authentic, 8—Commercial products are given under 12, p. 221—Examination questions, p. 164.

1. This country lies in the tropics and sub-tropics, between the two continents of Asia and Africa; joined to the first by the desert land of Syria and the river-flats of Mesopotamia and to the second by the Isthmus of Suez, which is now cut by the navigable Suez Canal. On all other sides, Arabia is bounded by the sea; west by the Red Sea, at the southern extremity of which, and commanding the Straits of Bab-el-Mandeb, lies the British possession of Perim, an island which forms a halting-place between Arabia and Africa; on the south extends the Indian Ocean, and on the east the Persian Gulf.

As on the west, so on the east, at the entrance to the Gulf, Arabia and Asia nearly join at the promontory of Ros Mos-sendom, which projects well towards the Asiatic shores in the Strait of Oman.

2. Arabia appears to be an immense pile of naked mountains and tablelands of Primary formation, encircled by a belt of firm dry sandy ground along the sea-coasts. The north-west is decidedly mountainous, and from the base of these mountains to the shore extends a lowland generally sterile. The country to the east and north is higher considerably than the coast land, and forms a vast tableland sloping to the Persian Gulf and river Euphrates. The central and southern parts seem to be only sandy deserts.

3. The land by the shores of the Red Sea to the mountains, and reaching to Sihut on the south, appears to be the only cultivable part; and, even here, *agriculture is only possible by continued work in irrigating*. There are no rivers, and all watering has to be artificial.

The coffee of Mocha is well known, and was probably introduced from near-lying Abyssinia.

4. The climate is very dry and the temperature hot, but with cold nights. The inhabitants are nomadic, and generally indifferent to commerce in an active sense.

5. Arabia appears to be debarred from even entering the category of commercial States; *the whole trade being confined to the coast towns and the narrow strips of shore land*.

6. The distributing centres are not many, and, in no case, are they very active. *There are no inland centres*. The most important is Aden, followed by Yembo for the Medina districts, Jeddah for Mecca, Ghunfooda for Doka, Loheida for Sana, Muscat and Sohar on the east for Oman, and a few small ports for the upper parts of the Persian Gulf.

7. Arabia simply exports raw materials, and receives in return a few cottons and manufactured goods; but the trade is passive and stagnant.

8. Arabia belongs to the Persian Gulf trade on its eastern shores, and to the Red Sea trade on its western coast. Its climate is tropical.

There are no authentic returns for Arabian trade.

For full details of the resources of Arabia, see p. 221.

PERSIA, AFGHANISTAN, AND BELOOCHISTAN.

Geographical position, 1—Characteristic of the trade movements, 2; Afghanistan and Beloochistan, 5, 6—**Geographical features**, 3–6—**Commercial activity**, 2, 5, 6, 9, 17, 18—Persia, description of, 4; Afghanistan, 5; Beloochistan, 6; as regards features, climate, and inhabitants—Commercial position, 5, 7—*Ebb and flow to and from natural centres*, with circulation of goods: Persia, 8; Afghanistan, 13—Industrial activity, 10—*Characteristic of the trade*, 10, 14—Centres of distribution: Persia, 11; Afghanistan, 15; Beloochistan, 15; the river Karun, 12, 16—Ports, 16—**Natural divisions of trade**, 19—**Mineral resources**, 3; Persia, 20; Afghanistan, 21; Beloochistan, 22—**Agricultural resources**: Persia, 23; Afghanistan, 24; Beloochistan, 25—Means of intercommunication, 1, 8, 9, 17; Persia, 26; Afghanistan, 5, 13, 27; Beloochistan, 28—Tendency of the trade of these areas, 29—**Examination questions**, p. 164.

1. These countries occupy the *south-western portion* of the continent of Asia, and connect in the north and north-east with Independent Tartary, and, by the caravan routes, with all Central and Northern Asia; on the east, with Hindostan; on the west, with the Turkish dominions of Mesopotamia and Armenia,—Asia Minor,—and on the north-west, with the Russian, Trans-Caucasus, districts. The southern frontiers are washed by the waters of the Persian Gulf and Indian Ocean, while the Caspian Sea laves a portion of the northern shores of Persia.

2. These territories must be classed as simply “transit;” but the prospect of the future enlargement of trade is excellent, if the railway systems now being extended in Asia Minor and the Caspian regions are projected to the Gulf and to India *via* these districts.

3. *The whole area is mountainous*, or, rather, comprises mountains, tablelands, and deep valleys; the elevations being indicative of mineral wealth, while agriculture is profitably pursued in the valleys. *The rivers* are few, and, like Arabia, the want of irrigation is the great difficulty which husbandry has to overcome.

4. Persia, the Land of the Lion and the Sun, presents in the south and south-west, along the shores of the Persian Gulf, a narrow tract of dry, sterile land, almost without water or irrigation, and consequently devoid of cultivation. Along the Caspian shores is a corresponding tract, but moister. Between these two belts stretches the great Persian tableland, which is, generally speaking, an immense dry salt plain, traversed by mountains and long valleys wherein cultivation is practicable.

The plains all lie to the eastward, and are nearly destitute of vegetation; towards the west the tableland narrows, but increases in height. The climate being almost tropical, everything in the open is scorched up; but, like all hot countries, Persia has its wet and dry seasons.

5. **Afghanistan** is a congerie of high valleys, mountains, and tablelands. The sides of the mountains and lower ranges are covered with forests. The valleys are generally traversed by streams, and all open into the great central valley of the Cabul river, which empties itself into the Indus; and this is necessarily the great natural trade highway, a boon to our Indian trade. **The climate** is somewhat similar to that of India; the people are given to a nomadic and pastoral life, and commercial pursuits are passive.

6. **Beloochistan**, lying between Afghanistan and the sea, is, in the east and west especially, mountainous. A large portion of the country is entirely desert; while the sea-coast is flat, barren sand, and destitute of water. **The climate** is generally healthy. What trade there is, is largely carried on by foreigners, the natives being rude, and leading a nomadic and passive life.

7. The commercial position of these districts for transit is highly advantageous, but very little active, direct trade is undertaken. Western appliances are gradually being introduced, and, with them, the volume of commerce must necessarily enlarge.

8. For commercial purposes, Persia *naturally gravitates* to the Persian Gulf southwards, to the Caspian Sea northwards, or by the caravan routes, to India on the one hand, to Russia or Asia Minor on the other, but these last means of intercourse are very slow.

9. The numerous valleys, the level Chaldean plains, and the advance of railway communication round the Caspian lead to the inference that the iron road eventually must connect the centres of all these areas. Then the costly goods and merchandise,—not adapted for long sea-voyages,—will gravitate to the Mediterranean or Black Sea for distribution, while bulky goods will have alternative routes.

10. Persia has a few national manufactures; the course of trade is exporting specialties and chiefly raw materials, and receiving, in return, finished European and other goods.

11. The chief distributing centres are—Bushire on the Persian Gulf; Bussorah on the Euphrates; Reshd and Balfroosh on the Caspian; and Kerman, Shiraz, Ispahan, Yezd, Shuster, Kashan, Sultanabad, Kermanshah, Hamadan, Teheran, Tabreez, Dizful, Meshed, and Beerjoon inland, on the caravan routes. Tabreez is said to be the centre of internal trade. These towns are established at the junction of several caravan routes, and form, in many cases, practical international emporiums.

12. The Shah of Persia has opened the only river of consequence, the Karun, to universal commerce, from Mohammara on the Turkish frontier to Ahwaz. The right of navigation is contingent on steamers assisting other vessels. Foreign merchants are allowed to stay at the various towns only so long as engaged in completing their business; but, beyond Ahwaz, Persian sailing-vessels only are permitted to proceed.

13. *Afghanistan gravitates naturally to India*, and the advance of Indian railways is rapidly drawing its enterprise into the vortex of Indian trade. For commercial purposes, all these countries are in a transition state, using the caravan routes to the sea where no other means of conveyance is possible, but utilising the railway as soon as introduced.

14. *Afghanistan and Beloochistan both export raw materials and receive manufactured goods in return, but chiefly through Indian trade movements.*

15. The *Afghanistan* centres are Herat, Farrah, Kandahar, and Cabul; the *Beloochistan* towns are really of no commercial importance as yet; these gravitate to the Indus.

16. The sea-coast is small, and there is a great dearth of ports; to *Bushire* on the one hand, and *Kurrachee* on the other, *all goods must as yet gravitate*, and these are the great places of distribution for Western goods; and now the river *Karun* will give another distributing centre. As we have seen, there are many *inland* caravan depôts, but the seaports must be the chief gravitating centres; those on the *Caspian Sea* have but little influence on English trade.

17. *Here, where Eastern passiveness and Western activity meet, there are alternate transit routes; one by the Persian Gulf, one by the caravan routes to and from the Mediterranean, Black Sea, and Caspian; and one by India.* Under present circumstances cost is really the only point considered, the speed being uniformly slow.

18. There are here markets for remunerative interchange, but increase of commercial activity is dependent entirely upon extra facility for transit and distribution.

19. *Persia, Afghanistan, and Beloochistan belong to the Persian Gulf trade; the last two countries being, likewise, factors in the Indian trade, Afghanistan gravitating to Hindostan by the northern passes, Beloochistan by the Indus.*

The temperature varies considerably between the plains and the heights, but the whole area lies in the warm temperate and sub-tropical zones, the region of the vine, orange, and palm.

The total area is about 2,500,000 square miles.

20. Among mineral resources, Persia, in its various provinces, yields antimony, amber, amethyst, argentiferous lead, bitumen, borax, coal, copper, gold, granite, iron, lapis lazuli, lead, marbles, naphtha, ruby, rock-salt, sal ammoniac, saltpetre, salt, sulphur, and turquoise.

Sulphur, almost solid, is taken from the crumbling cone of Mount Demavend.

Turquoise from the famous mines of Meshed (Nishapur).

Azerbaijan seems the most productive district.

Farsistan yields bitumen, naphtha, and a mineral gum called mumea.

21. Afghanistan consists of lofty bare tablelands, mountain ravines, and valleys, many of the latter being very fertile. About four-fifths of the surface is rocky and unproductive. Iron and lead are practically the only minerals worked, although many of the more valuable exist—copper, gold, lapis lazuli, rock-salt, ruby, sapphire, &c.

22. Beloochistan is rugged and mountainous, with extensive sandy deserts quite unproductive. Minerals are supposed to be plentiful in the high lands, and to consist of copper, gold, iron, lead, petroleum, salt, saltpetre, and silver.

Petroleum is now the most valuable product in the eastern districts.

23. Persia is very fertile in the valleys and by the rivers, and the climate very hot. The east and south-interior are barren, and there is a sandy belt by the Gulf equally bare.

The agricultural produce consists of barley, coarse cotton, date, dye-plants, figs, flax, fruits, gums, hemp, honey, indigo, maize, mulberry, madder, oats, opium, oil, pastures with cattle, sheep, &c., peaches, pomegranate, rice, rye, roses, saffron, silk, sesame, sugar, tobacco, wax, wheat, and wood.

Forests yield, on the high lands in the south-west, beech, cypress, elm, oak, box, cedar, walnut, &c.

At lower elevations barley and wheat thrive, while in the

plains and valleys, the vine, and vegetation, generally, are luxuriant.

The swampy shores of the Caspian grow cotton and rice.

24. **Afghanistan** yields asafetida, barley, beans, cypress, cotton, date-palm, fruits, gums, indigo, lentils, millet, medicinal plants, mulberry, maize, madder, peas, rice, sugar, tobacco, wheat, and woods (acacia, birch, cypress, holly, oak, pine, plane, poplar, palm, tamarind, walnut, and wild olive).

The mountains are the homes of the forests. On the offshoots of the Hindoo-Koosh, indigo is indigenous and asafetida common. The cultivated land is very small, but, off this portion, there are often two harvests yearly.

25. **Beloochistan**.—The soil is not in general fertile, but industry and care have produced, in the valleys and plains, good crops of barley, almonds, catch, fruits, indigo, millet, madder, tobacco, and wheat.

26. **Local Trade Movements**.—Persia, by the caravan routes and the rivers Tigris and Euphrates; these are the only means of reaching the seaports, there not being a single line of railway in Persia; but the river Karun will probably now be an important commercial waterway.

Persia enjoys a considerable *transit-trade*, having the through caravan routes from Constantinople, Tiflis, Erzeroum, and other places in Asiatic Turkey to India, China, and Central Asia; it also engages in the trade of the Caspian Sea, which is important.

27. **Afghanistan**, too, is a transit country between Persia on the west, Turkestan on the north, India on the east, and Beloochistan on the south. The routes to India are by the **Khyber Pass**, **river Cabul**, **Gomal Pass**, and **Bolan Pass**. All transit is confined to the *roads* and *bullock-tracks*, but *railways* are destined to join Candahar and Afghanistan generally with the railway system in Hindostan.

28. **Beloochistan** sends to India by the **Bolan** or **Molot Passes**, and sends down the river Indus to Kurrachee. Transit in Beloochistan is entirely by *road*.

These countries connect, the one with the other, by roads or the main caravan routes.

Over-sea traffic is *viâ* Bushire and Bussorah on the Persian Gulf, or through India to the seaports.

29. No reliable trade returns being published, a digest cannot be given ; nor can much expansion of commercial intercourse be anticipated until better means of conveyance prevail or the system of Oriental railways more nearly approaches completion ; although Persia possesses specialties of unique interest and value. Trade is most likely to open out on the eastern frontiers, *viâ* India, in the first instance ; the other movements at the mouth of the Euphrates being relatively small, although increasing. The returns of the "regular lines" to the Persian Gulf are an index to the possibilities of the richness and value of the various local industries. *When the projected lines in Asia Minor are more developed, part of the trade may probably be diverted to the coasts of the Levant and Archipelago.*

*Examination Questions on Arabia, Persia, Afghanistan,
and Beloochistan.*

1. Give the geographical distribution of the "raw materials of commerce" indigenous to Arabia.
2. Characterise the trade and trade-routes of Persia, Afghanistan, and Beloochistan.
3. Name the special produce and manufactures of the above-named countries, with the chief distributing centres of each country.
4. How has the Persian Shah recently promoted the advancement of commerce in his dominions ?
5. What promise of commercial development encourages belief in the future material progress of all these regions ?
6. To what trade-areas do these countries respectively belong, and how is their commercial activity likely to be stimulated by their proximity to British India ?

BRITISH INDIA.

Geographical position, 1, 1a, 9, 20—**Geographical features**, 1, 4-8, 21—**Commercial position**, 1a, 2, 8, 9, 21-24, 29—**Divisions of the country**, with their characteristic produce, 3, 7, 10, 25, 26, 31, 39—**The Himalayas**, 4, 13a; **great plain**, 4, 13c; **Ajmeer tableland and North Central India**, 5, 13b; **Taptee valley**, 6, 13b; **Deccan**, 6, 13c; **South India**, 7, 13c—**Harbours of India**, 8—**Land frontiers and transit**, 2, 9, 21, 27—**Climate**, 10; **people**, 11, 19—*Characteristics of Indian trade*, 2, 12—*Ebb and flow to and from natural centres*, with circulation of goods, 5, 14, 18—**Ports and centres**, 13, 13a, 14, 15, 18, 39—**The district served by each port**, 13a, 13b, 13c, 13d—**Industrial activity**, 15, 19—**Inland centres**, 16—**Commercial activity**, 11, 17, 18, 19—**Burmah, geographical position**, 20—**Commercial position**, 21-23, 29—**The rivers and centres of Burmah**, 24, 27—**Soil**, 26; **climate**, 26—**Commercial activity**, 27, 28—**Natural division of trade**, 30—**Mineral resources**: **Area 1**, 32; **Area 2**, 36; **Area 3**, 40—**Localisation of the principal metals and minerals**, 33—**Agricultural resources**: **Area 1**, 34; **Area 2**, 37; **Area 3**, 41—**Localisation of same**: **Area 1**, 35, **Area 2**, 38—**Means of intercommunication**, 2, 27, 28, 42—**Trade statistics**, 43; **Ceylon**, 45; **review of the movements of trade and population from 1872 to 1881**; of India, 44; of Ceylon, 46—**Examination questions**, p. 188.

1. **British India** or **Hindustan** is a peninsula narrowing towards the south, in conformity with the contour of all the great peninsulas of both hemispheres. Washed by the Indian Ocean and Bay of Bengal, no part of India is far removed from the sea,—east, west, or south. Many of the rivers, which are numerous, avail for transit only during the rainy season, forming *wadies* or dry channels in the months of drought. Hence the recent development of railway construction greatly facilitates the distribution of the rich and varied products of our imperial dependency.

a. To the north of India lies **Thibet**, separated by the

Himalayas; on the north-west the empire is in touch with **Tartary, Afghanistan, and Beloochistan**; and on the north-east joins **Burmah**. Her western shores are not far distant from the Red Sea and the Suez Canal, and hence with European trade; on *the east* she is close to Singapore and the eastern seas, and, on *the south*, she stretches out towards the island continent of Australia, thus commanding all the commercial movements East by the Suez Canal.

2. By land, the railways connect with the caravan routes traversing the Asiatic continent, thus inducing an active frontier trade for goods destined for other climes and sea-borne routes.

3. The Himalaya Mountains, intercepting the northern winds, extend along the whole northern frontier and present a succession of the loftiest snow-peaks. There are many lateral ridges and ranges, and between these, narrow but lofty valleys, *well watered and generally cultivated*.

4. To the south of the mountains and hilly regions extends the great plain of Hindostan, falling with a very gradual slope to the east and west of the peninsula; on this are to be found *the most populous centres*.

5. Between the Indus and Ganges rivers, *separating*, as it were, the *natural gravitation* of goods, extends a ridge of hills, running north-east and south-west for about three hundred miles. To the north of 25°, two branches of these hills enclose a tableland, which continues to Ajmeer; farther south, is a hilly country which covers the greater part of **Central India**, with a particularly noticeable lateral division comprising the valleys of the rivers Nerbudda and Mahanuddy, which practically meet in Central Hindostan, and form *contrary natural gravitations east and west*.

6. To the south of the river Nerbudda is the valley of the Taptee, beyond which rise the Ohandore and Gawilghur ranges, forming the mountain borders of the great Deccan tableland.

7. Southern India is a succession of tablelands, hills, and

valleys ; an undulating country sloping on either hand to the sea in terraces, and very plentifully watered.

8. This map exhibits, therefore, a variety of physical features which have their own special effect upon commerce. Although India is geographically and commercially well placed, and has such an extent of sea-board, she has, unfortunately, but few sheltered harbours ; *vessels have to lie off the coast for loading and discharging, the cargo being conveyed in surf-boats by the coolies. This is a great deterrent to mercantile business, especially during the stormy seasons ; and harbour works would consequently yield a large return in increased trade.*

9. The land frontiers abut on countries as yet but little opened to commerce, but the means of transit are not difficult, and hopes are entertained of a larger trade with these border nations. *The mountain passes and the proximity of the watersheds of the rivers flowing in different directions indicate the natural course of transit.*

10. The climate of the low countries is tropical, and the year divided into wet and dry seasons. Owing, however, to the great and abrupt elevation of portions of the surface of the peninsula, the area exhibits varieties of climate, corresponding to those met with in every degree of latitude from the equator to the poles ; so that, while the plains are burnt up with intolerable heat, some of the mountains are covered with everlasting snow. Between these extremes, the climate is delightful ; hence vegetation ranges from Northern fruits and cereals to tropical rice, drugs, and spices.

11. Among the Hindoos, the system of caste prevails to its greatest extent, and while the natives, generally, do the work for the European residents, these last carry on the commerce of the country. There are eminent exceptions, in wealthy Parsee merchants ; but the population, as a whole, must be classed with the passive races.

12. India is a country commercially the reverse of England, exporting, in the main, raw materials and a

few manufactures of purely Eastern work, and importing manufactured goods.

13. The great centres of distribution for sea-borne merchandise are Kurrachee, Bombay, Madras, and Calcutta.

a. The first commands the entire valley of the Indus, and draws goods from the Punjab and the north-west country; the desert of Rajpootana being, for commercial purposes, comparatively worthless.

b. Bombay is the natural *gravitating centre* for the wheat-fields of Central India, the valleys of the Nerbudda and Taptee, and the resources of the Deccan; this last by the railways, the "set" of goods from the West Ghauts being to the east coast; but the necessity of a shortened passage home has broken down the natural barriers, and the rail attracts goods to the Bombay circle.

c. Madras draws merchandise from the whole of the south; while (d.) Calcutta is the great centre for the Gangetic plain, and the large river-cities of Bengal, Oude, and the North-West Provinces; besides the trans-mountain districts of Thibet and Burmah by the river Brahmapootra.

14. We thus trace that all parts of Hindostan, as well as the adjacent countries, have *easy natural transit to the great centres of gravitation, the seaports*. There are also several minor ports which act as outlets for smaller circles, such as Cuddalore, Negapatam, &c., commercially known as the "Coromandel coast;" Mangalore, Cannanore, Calicut, &c., known as the "Malabar coast."

15. The greatest business centres lie in the Gangetic valley, because of the multitude of tributary streams to that river; hence, Calcutta is the greatest of Indian centres, further aided by the railways, which are easily laid in this plain.

16. Inland towns are of more importance as *military posts* than as commercial centres. Some places are noted for certain specialties, such as Dacca for *muslin*; and a few river-towns, like Patna for *rice* and *opium*; but, generally, commercial activity clings to the sea-shore and river-banks.

17. Where India is trying to manufacture for herself; the seaports and river-ports have been selected for the purpose. Jubbulpore, in the Central Provinces, is said to have, however, a transit-trade larger almost than any other town in India.

18. The immense agricultural resources find their way to one of the ports named; the minerals and metals of the high lands come down to the northern ports; while the manufactures aggregate farther south, and distribute by Madras and Bombay.

19. Europeans, taking advantage of the cotton, jute, and other fibres growing in India, have purchased machinery from England and started manufactures, instead of, as formerly, sending the raw material home, and waiting its return as finished textiles. Indian cotton goods are finding a sale in Zanzibar, Japan, and other Eastern markets.

20. *Burmah*, now a portion of our Eastern possessions, lies to the eastward of Hindostan, and is a country rich in every agricultural and mineral resource.

21. From the sea to about $17^{\circ} 30'$ N. the land is low; thence to 22° , elevated and hilly; and farther north, mountainous. It thus represents a district sloping from north to south, watered throughout by fine rivers.

22. *Burmah* abuts, on her land frontiers, on the tea districts of *Assam* on the west; *Thibet* on the north; the Chinese province of *Yunnan*, *Tonquin*, on the east; *Siam*, *Pegu*, and the *Bay of Bengal* on the south and south-west.

23. So situated, *Burmah* is a natural resting-place between *China* and *India*, and *China* and the sea at *Chittagong*.

24. The river *Irrawady* gives natural transit through the very heart of *Burmah*, running through *Pegu* to *Rangoon*; while *Akyab* and *Chittagong* are easily reached, and are important centres on the *Bay of Bengal*. The frontiers present no difficulty for reaching *Calcutta*.

25. Minerals and metallic ores are very abundant, and as, by British enterprise, roads and railways penetrate the interior, they must well pay for working. The ruby-mines are renowned.

26. The soil is exceedingly fertile; timber abounds, drugs also, while spices and all Eastern produce flourish exuberantly. The climate is sub-tropical, but more temperate on the higher lands and towards the north.

27. Transport has been effected almost exclusively by the Irrawady, which is navigable for a considerable distance. As Burmah is opening out, river-boats are unequal to the traffic, and many tons of produce are reported, as often left on the banks for want of means of conveyance, there being few inland roads. This, in itself, indicates the productiveness of the region and future fields and markets. If scarcely more than the bare state of nature yields so much, what must enlightened enterprise effect!

28. By the circuitous route of the river Brahmapootra round the Himalayas, water conveyance is given between Calcutta, Assam, and Nepal to the confines of Thibet; while, comparatively speaking, only a few miles separate the head of this river from the Indus, giving a water route from Cashmere to the sea at Kurrachee.

29. Of all Asia, British India is the best placed for commerce, whether sea-borne or by overland transit; and in the future we may look for the riches of China and Central Asia filtering through to Indian ports for world-wide distribution.

30. India, with the island of Ceylon, forms one of our most, if not the most important of our "trades," namely, the "Indian trade."

The climatic conditions favour every species of agricultural produce, from the luxuriant growth of the tropics through the temperate zones, to the scanty growths of the far North; and these find their equivalents on the slopes of the Himalayas.

31. Hindostan, or, more correctly, the compass of the Indian trade-area, may be divided into *three divisions* or sub-areas—(1) lying between 38° and 20° N. lat. or thereabouts; (2) all India south of 20°; and (3) Upper and Lower Burmah and the eastern shores of the Bay of Bengal.

32. The mineral productions of India comprise, along the

Himalaya Mountains from about 38° N. sloping to about 28° N., amethyst, amber, beryl, copper, cinnabar, felspar, gypsum, gold, hornblende, iron, lead, limestone, lapis lazuli, marble, mercury, nitre, opal, petroleum, quartz, rock-salt, ruby, silver, sapphire, sandstone, salt, turquoise, and topaz.

33. South of the mountains and in the plains of Assam occur beds of coal, which reach from about 95° E. long. and 28° N. lat. across the peninsula to Cutch in 73° E. and about 22° N., and include the neighbourhood of Burdwan. Coal occurs locally round Nagpoor, in the regions bounded by the river Ganges, Godavery, and Nerbudda, in the Damodar valley,—Calcutta circle,—Wardha valley, Makum, Assam,—supplying nearly all the steamer and railway requirements, while the coke is used in tea manufacture,—Cutch, Sylhet, in Hazara, North-West Punjab, Palamow,—Berar,—Rajmahal district, Sumbulpore, &c.

The Singareni coalfields are situated near to an abundance of magnetic and hematite iron, limestone, and fireclay. A produce approximating 100 million tons is computed to be available within 300 feet of the surface. Coal in the Nizam's Territory (Barakar) covers twelve square miles, and is a soft coal.

Copper is worked at Baragunda, the most important site, and in the Himalayas.

Diamonds are found in the Kulu valley and Bundelcund.

Gold in Mysore, Nundydroog, Kulu, Manikeran, Bilan Kothe, Wynaad, &c.

Iron near the Singareni coalfields, at Sonthalia, &c.

Nitre and nitrate of soda in Behar.

Petroleum in the Himalayas, and at Sibi in Beloochistan; also at Kattun and Rawul Pindi, where the oil is of excellent quality, the heat of three barrels of oil being equivalent to one ton of coals.

Plumbago in Travancore.

Salt in the plains of Rajpootana, Cuttack, and the marshes south of Calcutta.

Silver in Kot, Kundi Kothi in the Kulu valley, &c.

Sulphur in Chong Kothe, Scinde, &c.

Other minerals dispersed throughout the country are antimony, alum, graphite in Kumaon, basalt, gold, gypsum, iron, kaolin, nitre, platinum, salt, soda, sulphur, &c.

34. Area 1 embraces the temperate, warm temperate, and sub-tropical zones.

From 38° to 25°, among the products of the soil, we find asafœtida, barley, buckwheat, betel-nut, bamboo, banyan, cotton, cucumber, catechu, caoutchouc, cardamoms, cabinet and other ornamental woods, ebony, eucalyptus, ficus elastica, fruits, fibres, flax, forest trees, ghee, ginger, gum copal, hemp, indigo and other dye-stuffs, jute, lac, linseed, limes, madder, melons and other gourds, millet, maize, poppy for opium, oil-seeds, pine-apples, pulse, peas, rhea fibre, rice, roses for "attar," rattans, sugar, sesame, saffron, spice, sandalwood, sapanwood, teak, tea, tobacco, wheat, and pasture for sheep and cattle culture.

From 25° to 20°, barley, betel, beans, cotton, dye-plants, fruits, grapes, gums, jute, indigo, melons and gourds, maize, millet, madder, opium, oil-seeds, pulse, rice, resin, sugar, safflower, wheat, &c.

35. **Cotton, hemp, flax, jute**,—all fibre-plants,—flourish chiefly in Bengal; *the Deccan* is covered with a fine black soil, disintegrated basaltic trap, admirably adapted for the growth of cotton. Cotton grows chiefly in the peninsula of India, on the heights to the south and west. American seed is said to thrive only on "red cotton soil," a disintegration of siliceous rocks; and on "South Sea Island" the detritus at the river-mouths in Bengal. The cotton now exported is the "short staple" of commerce, and styled Bengal's, Surat's, or Madras. Some local names are Broach, Dhollerah's, Bengal's, Omra's, Kandesh, Darwar, Coimbatour, Guzerat, Kattiwar, Berar's, Scinde, Comptah's, Mysore, Uplands, &c. The ports for export are in the following order of importance:—Bombay, Calcutta, Madras, Tuticorin, Kurrachee, and Coconada.

Date-palm, Persian variety, promises well in Bengal and Punjab.

Indigo, cultivated chiefly from Dacca to Delhi, in Bengal, Patna, and Punjab, is known by such local names as Behar, Bhagulpur, Benares, Champarun, Chupra, Doab, Jessor, Krishnaghur, Mahai, Purnea, Ragshaye, Tirhoot, &c.

Jute in Bengal, favoured by the damp, warm climate.

Opium in Bengal, Patna, Punjab, Behar, Benares, and Malwa.

Rhea is cultivated principally in Bengal and Assam.

Rice on the extensive plains of Bengal, Tanjore, Madras Presidency, Lower Bombay, and generally on the banks and at the mouths of the rivers, where the inundation is the most excessive and the temperature hottest.

Silk in Bengal, Burdwan, Rajshahi, Punjab, and Assam. The silk industry of the Punjab is thought to be declining, and the only part of the province suited by climate for this product is the low outer Himalayas and a strip of country below them; and, even there, the work is carried on desultorily by emigrants from Cashmere. The centres in the province are Umritsur, Lahore, Mooltan, and Jullundur. The imports come chiefly from Bengal, China *via* Bombay, Yarkand, and Bokhara.

Sheep-rearing for wool is carried on mainly on the uplands of Mysore, Coimbatore, the Deccan, Jeypore, &c.

Tea in Chittagong, Darjeeling, Assam,—Cachar, Sylhet, Sibsagor, Lakhimpore,—Gauhatti, Silchar, North-West Provinces, Punjab, Ceylon, &c. In Cachar, planters are inclined to extend the tea-plantations on low-lying lands formerly rice-grown, and abandon the hilly country as less profitable.

Tobacco in Bengal,—almost anywhere in Lower Bengal,—Rungpore has the chief output; most goes to Burmah, returnable thence as cigars. The cultivation of tobacco is extending in Dovars; the Nuddea district produces Hingli tobacco, the best and highest-priced. American seed is thriving in Kulu.

Wheat is grown principally in Punjab, North-West Provinces,

and Oude ; then Central Provinces, Bengal, Bombay, and Berar. The export towns are Bombay, the chief outlet ; Calcutta, with only half, and Kurrachee one-third, the importance of Bombay ; Madras and Rangoon small. The total export in 1886 was estimated at 22,125,000 cwts. Wheat, barley, and pulse are sown during the dry season, October to June ; millets, jowaree, bajree, maize, and rice during the wet season.

36. **Area 2** embraces all Hindostan south of 20° N. lat. Just below 20° N. and in the neighbourhood of the Nizam coal-measures, occur basalt, felspar, hornblende, limestone, sandstone, and diamonds. The world-famed name of **Golconda**, the depôt of the trade, belongs to this area. Among the hills on the west coast iron, silver, and gold are met with ; also salt, kaolin clay to the west of Madras, and copper at Nellore.

The **mineral wealth** of the area is not of primary importance.

37. This region embraces *the lower sub-tropical and tropical zones* ; and we find anise, barley, borax, cassia, coffee, coco, cardamoms, cinchona, catechu, dye-stuffs, drugs, ebony, eucalyptus, ficus elastica, fruits, ginger, gamboge, gourds, gums, gum lac, guava, honey and wax, hemp, indigo, jute, letchi, linseed, mango, myrobalans, melons, mahogany, nut-palms, oil-seeds, pine-apple, millet, pepper, rhea, sugar, sesame, saffron, senna, safflower, sanderswood, teak, tea, turmeric, wheat in the north, woods of various kinds, with fruits, consisting of apples, pears, plums, apricots, &c., in the northern part of Area 1, and mango, plantain, citron, date, grape, pine-apple, pomegranate, almond, tamarind, &c., towards the south.

38. **Barley**.—The Madras Presidency is making special efforts to encourage the growing of barley on the hills. Malt-ing barley is chiefly aimed at (Punjab seed being advised).

Boxwood is now cut and sent experimentally to England.

Coffee is cultivated in the Neilgherry Hills, Mysore, Coorg, Wynaad, Ceylon, &c.

Cinchona in the Neilgherry Hills,

Ginger, pepper, cardamoms, and other spices in Coorg, Mysore, &c.

Ipecacuanha is a growing industry in the Southern Presidency. In 1886, the number of plants increased 250 per cent. The climate and soil round Nilambur are both suitable.

Oil-seeds are grown and shipped from the Coromandel and Malabar coasts.

Palms bearing nuts, dye-stuffs, anise, and spices, &c., throughout the south.

Silk in Madras.

Sugar-cane and tobacco in Mysore, Bombay, and Madras.

Tea in the more elevated parts of the south.

Experimental plantations of indiarubber, mahogany, and Arabian date-trees have been planted near Bangalore with such success that the Mysore Government are extending them.

39. **Area 3** embraces Upper and Lower Burmah and the eastern shores of the Bay of Bengal, including the ports of Chittagong, Akyab, Bassein, Rangoon, and Moulmein; Bangkok, in the Gulf of Siam, being also classed as a "rice port."

40. **Burmah** possesses many mineral products, and yields antimony, arsenic, blue limestone, coal, gold, iron, lead, marble, nitre, petroleum; especially rich in paraffin, quartz, silver, sandstone, sulphur, and precious stones.

Mr. Colquhoun says: "The most important minerals will probably be coal and petroleum. It is of the utmost importance to us on the east side of our Indian Empire to possess oil-fields, and there seem good prospects that in North-East Assam, Upper Burmah, and the Shan States we shall find such a supply as will place us in the position of a petroleum power. The wealth of Burmah, including its resources in the west, the Shan States, and Assam, is incalculable, but it lies fallow at present for want of communication."

41. This area belongs to the *warm temperate and sub-tropical zones*, and yields betel-nut, cotton, doll, durian and other fruits, ebony, gram, indigo, mustard, pepper, rice, sugar, sesame, teak, tobacco, tea round Chittagong, various woods, &c.

42. **Local trade movements** are varied; in the dry season,

by road and rail, to the seaports; by the rivers, canals, and streams, in the wet season; and thence, east and west, to England, our colonies, or other nations, by magnificent ocean-steamships.

Of almost more importance is the frontier and "up-country" movement,—to Burmah, the Shan States, Nepaul, Cashmere, and other independent territories; to Thibet, Beloochistan, Afghanistan, and Central Asia generally. This transit-trade is effected by the old caravan routes. The Irrawady, navigable for at least 840 miles, is an important element in our Burmese trade; Chinese goods in the future are likely to find an outlet *viâ* Burmah. This prospect of facility of interchange with China, *viâ* our possessions, and increased demands from Thibet and Central Asia, make our commercial men turn great attention to Indian trade. The route to China by Burmah is claiming much consideration, as there are several alternative ways, and whether Calcutta or Chittagong shall be the outlet port, rests upon the decision.

Increased frontier and up-country trade must operate as a great stimulus to our direct trade with India. The ports of Kurrachee, Calcutta, and Chittagong give every facility for the introduction or export of merchandise destined for our markets or otherwise sea-borne.

The railways advance well towards the frontiers. Transit-trade with India embraces Beloochistan, *viâ* Kurrachee; Afghanistan, chiefly wheat; Persia, sending dried fruits, and receiving wheat; Cashmere, Thibet, Nepaul, Bhotan, Assam, Burmah, Khelat, Seistan, Hill Tippera, Cabul, Karennee, Siam, Zimnee, Bajour, and Sikkim. Assam exports *viâ* Calcutta, transit being mainly by steamer. Chittagong shares somewhat in this trade, but it is a long way to the sea by this route.

India is well furnished with railways and appliances for conducting a colossal commerce. Her resources are hardly yet encroached upon. The country is a market opening more and more to British enterprise, and claiming from our intelligence

to make the utmost of so goodly heritage, for native advancement and our own profit.

43. Turning to statistics, the **population** in 1872 was about 190½ millions, or 211 to the square mile; besides the Native States, returned as 48½ millions.

From 1870 to 1874 the **total imports** averaged 40½ millions a year, and the **exports** 57½ millions; of treasure the imports averaged 8½ millions, and the exports a trifle over a million and a half. **Great Britain** at this time averaged 30½ millions of the **exports** annually, and contributed 20¼ millions to the **imports**. The **staple exports** were cotton (10½ millions, and weighing 3½ million cwts.), jute (3½ millions in value, and weighing 4½ million cwts.), rice (3¼ millions, and 6¾ million cwts.), indigo (1½ millions, and 62½ thousand cwts.), tea (just over 1½ millions sterling, and 17½ million lbs.), and hides (1¾ millions in value, weighing over 320,000 cwts.). The **chief imports** were cotton (16¼ millions, the yearly average for 1870 to 1874 being 14 millions), and iron (1¾ millions). China and Japan followed Great Britain in volume of trade.

In 1881 the **population** had risen to 201¾ millions, and the Native States to just over 55 millions. The Native States had a density of 108, and *all India* of 184, to the square mile; varying from 440 in Cochin (Madras), 403 in the North-West Provinces and Oude, to 79 in Rajpootana and 43 in Lower Burmah. At this period, the area returned was greater.

From 1881 to 1885 the **total imports** averaged yearly 62¾ millions, and 83½ million **exports**; while in 1886 they were 67¼ and 85 millions respectively. Of these, imports of treasure averaged 12 and exports 1¼ millions. During this term **England** held 35½ millions of the **exports**, and contributed 30 millions to the **imports**. The **staple exports** in 1885 were cotton (3 millions, the average 1881 to 1884 being 6½ millions a year), wheat (4½, with an average of 4½ millions), jute (3½, average 4 millions), seeds (4½, average 3½ millions), tea (3¾, average 3½ millions), rice (1¾, average 3½ millions), indigo (1¾,

average $2\frac{1}{2}$ millions), leather ($1\frac{7}{8}$ millions), hides (a million and a half), coffee (£600,000), and wool (£800,000). The chief imports were cotton goods (18 millions,—average from 1881 to 1884, $19\frac{3}{4}$ millions), iron ($2\frac{7}{8}$ millions), copper ($1\frac{1}{2}$ millions), machinery ($1\frac{1}{2}$ millions), and woollens (just over half a million).

Besides the sea-borne traffic, there is a very considerable land frontier trade.

44. From this history we are able to gather that the population *increased* about $7\frac{1}{2}$ per cent., and the Native States about 14 per cent. From 1870 to 1885 the total imports *rose* over 50 per cent.; while in the single year 1886 the rise was still higher, being 8 per cent. above the average for 1881 to 1885. Of these imports, treasure *rose* 50 per cent. The total exports *increased* about 45 per cent., nearly as much below 50 per cent. as the imports were above it. 1886, again, showed a steady rise; the export of treasure remained practically stationary.

In 1870 to 1874 Great Britain held about 52 per cent., or just over one-half, of the exports, and supplied exactly 50 per cent. of the imports. To preserve the same ratio in 1881-85, we should have held £43,200,000 exports and £31,375,000 imports; the figures really were £35,500,000 and £30,000,000; or, in other words, 42 per cent. of the exports and 47 per cent. of the imports. This shows a decline in our trade as compared with the total rise. The proportion of our rise was 18 per cent. exports and 50 per cent. imports.

With regard to exports, we find a *serious falling off* in cotton. This commodity declined fully 66 per cent.; jute was *stationary*; rice *fell* nearly 50 per cent. for the year 1885, but remained quiet on the average; indigo was *stationary* for the year, but the average *rose* 25 per cent.; hides were *quiet*; while tea *rose* quite 125 per cent. Wheat, too, took a prominent place among exports. We thus trace a progressive tendency in all commodities, on the average, **except in cotton**, which we now obtain from other countries, and India herself consumes;

the cotton-mills of India using much, if not most, of the cotton which formerly came to Lancashire; but against this loss, wheat and seeds have risen to the front rank, as staple exports. Leather is also an article of increasing importance. Tea, which is making its way very successfully against the Chinese article, has risen very largely, while coffee and wool only show comparatively small figures.

Turning to imports, the average of cotton goods *rose* quite 40 per cent., and for the single years of 1874 and 1885, 12.5 per cent. Iron shows a *considerable rise* of quite 50 per cent. During this period also, 1870-85, rails, railway material, and bridge-work have been much sought for.

Copper figures as a fairly large import, while woollens, which were unknown in 1870-74, come out in 1881-85 to the value of half a million sterling. India is, however, now competing with us in textile manufactures, not only for her own supply, but for the consumption of other Eastern countries. Whether the wisest course would be to introduce English capital into India, and foster and assist these and other industries, is an economic question of grave moment.

Aniline dyes are supplanting the indigenous colours formerly used. The chemical preparation, also, of indigo has acted adversely upon the culture of the indigo-plant.

Of the total area of India, 1,382,624 square miles, the available land for cultivation seems to be 621,000,000 acres, of which only about one-third is cultivated.

The agricultural statistics of British India say there are 479,000,000 acres in the empire; 118,000,000 do not come under the revenue and agricultural department survey, as being land belonging to feudatory or tributary States, and for other reasons. Of the rest, 361,000,000 acres, less than half, or only 150,000,000 acres, are cultivated. Of the remainder, 39,000,000 are forest, 16,700,000 uncultivated, of which quite half is available for cultivation. Approximately, rice occupies 60,000,000 acres; wheat, 26,735,484; other cereals, 80,000,000; seeds, 10,000,000; sugar, 2,000,000; fibres,

10,000,000; indigo, 2,000,000; cotton, 14,000,000; and tea, 266,286 acres, of which it appears Assam is cultivated to the extent of 203,993 acres.

From these figures the still undeveloped resources of India are apparent; her abundant-agricultural produce, her mineral wealth, her unique industries, and the opportunity that offers for carrying on home manufactures exhibit one of the finest markets of the world only partially and inadequately opened.

45. Ceylon has distinct trade returns of her own. In 1870 the population was returned as just over 2 millions, or eighty-seven to the square mile.

From 1870 to 1874 the total imports averaged $5\frac{1}{2}$ millions a year, and the exports $4\frac{1}{2}$ millions. Of the exports Great Britain took a value of $3\frac{1}{2}$ millions, and supplied of the imports 1 million. The staple exports to us were coffee ($2\frac{7}{8}$ millions), coco-nut oil (£175,000), and cinnamon, (£125,000). The staple imports were cotton goods, valued at £600,000.

In 1885 the population had risen to just over $2\frac{3}{4}$ millions, being equivalent to 108 to the square mile.

From 1881 to 1885 the total imports averaged annually $4\frac{1}{2}$ and the exports $3\frac{3}{8}$ millions. Of these, the exports to Great Britain averaged $2\frac{1}{4}$, and the imports from us three-quarters of a million. The staple exports were coffee (1 million), cinchona (five-eighths of a million, having risen from less than £100,000 since 1881), coco-nut oil (£125,000), cinnamon (£60,000), plumbago (£70,000), tea (one-fourth of a million, rising from less than £40,000 in 1882). The chief imports were cotton goods (£140,000), iron (£40,000), and coal (£100,000).

46. We thus deduce that, although the population rose fully 30 per cent., trade *relapsed*. The total imports *declined* nearly 20 per cent., and exports 25 per cent. British trade suffered a like *falling off* of 33 per cent. in exports and 25 per cent. in imports. In the 1870-74 period we held a little over 75 per cent. of the exports, and directly supplied 20 per cent. of the

imports. *In 1881-85 we held only 66 per cent. exports and 16 per cent. imports.*

The disease to the coffee-plants accounts in a great measure for the decline in the export of this product; but cinchona and tea are becoming large industries, and take prominent places among exports.

Our sale of goods to Ceylon, although supplemented by coal and iron, suffered largely, cotton goods falling fully 75 per cent.

Ceylon being so advanced in agriculture, there is no reason to doubt that trade will continue to advance and increase; the resources are so diversified and of such a rich character that the prosperity and advancement of the island are assured. Necessarily, as India manufactures for herself, Ceylon will obtain these manufactures, owing to her proximity, provided that they are as good and cheap as those obtained from other centres.

FARTHER INDIA.

Political divisions, 1, 27—**Geographical position**, 2, 3, 5, 8, 9, 11, 14—**Geographical features**, 1, 3, 6, 8, 9, 10, 14-17—Climate and soil, 1, 4, 12—**Commercial position**, 2—Tonquin, 3; Anam, 5; Cambodia, 8; Siam, 9; Laos, 11; Malay Peninsula, 14; descriptions of.—The Me-kong river, 7—Bangkok, 10—Saigon, 13—*Ebb and flow of goods, with natural centres*, 3, 7, 10, 13—**Commercial activity**, 17, 23—The people in relation to commerce, 18—Centres and ports, 17, 19, 22-25—Physical conditions in relation to resources, 4, 20, 21—*Characteristics of this trade*, 21, 24, 25—**Natural division of trade**, 26—**Mineral resources**, 28—Localisation of the principal metals and minerals, 29—**Agricultural resources**, 30—Localisation of agricultural produce, 31—Means of intercommunication, 32—**Trade statistics**, 33—Review of the movements of trade from 1874 to 1884, 34—**Examination questions**, p. 188.

1. Farther India includes Tonquin, Anam, Siam, Cochinchina, Cambodia, Laos, Pegu, and the Malay Peninsula; all territories, compared with their capabilities, but feebly opened to foreign commerce; although the coast-line is of great extent, the harbours good, the climate excellent, and the soil of unsurpassed fertility, enriched with the alluvial deposits of the rivers.

2. This area occupies the whole of the south-east corner of the continent of Asia, and is washed by the China Sea, Gulf of Siam, and Indian Ocean; on the northern frontier it abuts on China, and in the west on Burmah. It is, consequently, accessible sea-wise to and from the whole world, and is the Eastern key for the globe's commercial movements from East to West and *vice versa*.

3. Tonquin embraces a rich alluvial district lying between the southern mountains of China and those of Anam and

Siam; watered by the river **Sang-ka**, which presents, therefore, a *natural water route* from South-West China to the sea at the port of Tonquin; and may thus in the future become an *international waterway*.

4. The soil is fertile, and the resources of the country extensive; but as yet the commercial movements are almost confined to the neighbourhood of the sea-coast and river-banks.

5. **Anam** is bounded on the north by Tonquin, and on the west by Laos and Siam, while the sea skirts the south and eastern frontiers.

6. This district is *naturally divided* into two long narrow strips of country, by a range of mountains extending parallel to the coast, from the confines of China to the Me-kong river; Tonquin and Cochin-China lying to the east on the sea-board, and Cambodia and Siam to the west.

7. The **Me-kong** river naturally carries the flow of goods.

8. **Cambodia** occupies the lower end of this valley, with the alluvial plain at the mouth of the Me-kong, and a small part abutting on the Gulf of Siam. The land is all fruitful.

9. **Siam** lies between Laos, Anam, the Tenasserim provinces, the Shan States, and Pegu, being bordered on the south by the sea. The greater part of the country is mountainous; high lands throughout the district run north to south, in a direction at right angles to those of China, and consequently the river-valleys have a southward tendency.

10. Round **Bangkok**, the great seaport and distributing centre of Siam, at the mouth of the Meinam river, is a rich alluvial plain adapted for the growth of rice; the whole country is well-watered, the streams gravitating to Bangkok.

11. **Laos** occupies the upper portion of the Meinam valley and the Me-kong valley, and abuts inland on China, Anam, Siam, Cambodia, and Burmah.

12. The climate to the south is hot, but less so northward. The soil by the rivers is fertile, yet the higher districts are arid.

13. The port of Saigon is the gravitating centre.

14. The Malay Peninsula is occupied by several long and parallel mountain-ranges, running here again from north to south, and forming between them wide valleys, and seawards maritime lowlands, which are fertile tracts, drained and watered by large rivers. This area is divided into the Tenasserim provinces and the peninsula proper.

15. The whole length of the eastern boundary of the provinces is occupied by mountain-chains; the rest is composed of fertile valleys, hills, and plains, sloping from the mountains to the sea.

16. The peninsula proper is a narrow tract of land, 750 miles in length, and varying in width. The high lands extend to the extreme point, and the whole country is of Primary rock formation.

17. *This map, therefore, shows us a district as yet almost entirely in a state of nature*, situated practically in the torrid zone, having the possibility of unlimited cultivation, but, generally speaking, sparsely populated. The sea-coasts are the most frequented, and exhibit the greatest signs of commercial activity, for it is to the seaports only that merchandise gravitates.

18. The people are, as in most hot climates, passive as far as commerce is concerned; in fact, in many parts they are worse, for they impede commercial enterprise inland.

19. The only towns of commercial importance are the seaports, foremost among which stands Singapore, which has risen into eminence as a trade-centre and emporium in a very short time, and stands as an example of what energy and intelligence will do in commercial matters among a people otherwise indifferent.

20. The mountain-ranges are probably rich in metals and minerals, while the soil throughout is capable of unlimited cultivation; the rivers give easy, and at present the only, transit, but the area generally gives promise of a large trade.

21. There are earth-gifts in plenty for European nations

to purchase, but they require working; and, as commerce increases there will be no lack of markets wherein to dispose of European goods in return, but at present there are no inland depôts.

22. The ports are well established, and are technically known as "the rice and teak ports." As inland commerce extends, these ports, so well situated on the rivers, must assume the position of important centres for internal distribution and receipt.

23. The supply of wood, rice, drugs, spices, &c., seems inexhaustible, and the prosperity of these States only awaits the advance of Western civilisation, with easier means of transit.

24. Commercial activity here, then, must be termed coasting and sea-borne, with the aid of mere tracks inland, and the rivers for floatage.

25. These areas are in diametrical contrast with England, being exporters solely of earth-gifts, and recipients almost entirely of Western manufactures.

26. Farther India, the Malay Peninsula, with the adjacent islands, form,—except the north part of Farther India, Burmah, &c.,—an area commercially styled the "Straits trade."

This region is the true spice district of the world.

27. The natural division embraces Assam, Upper and Lower Burmah, Shan States, Siam, Cambodia, Cochin-China, Anam, and Malay, with Tonquin as a sort of hanger-on between this trade and the Chinese; it also includes the East Indian Islands.

Burmah, Assam, and Pegu, by facility of transit, belong to the "Indian trade;" they are, therefore, there included and treated of.

28. Among other mineral resources are alum, amber, asphalt, antimony, basalt, cinnabar, copper, coal, gold, granite, jade, iron, lead, limestone, manganese, naphtha, precious stones, petroleum, porphyry, ruby, quicksilver, silver, sulphur, salt, sapphire, topaz, tin, and zinc.

29. The specialties are *tin* in Borneo, Banca, round Singapore, and generally in Siam and Malay.

Sulphur in Java.

Coal in Labuan and Borneo, both undeveloped.

Gold in Siam.

Iron abundantly in Siam.

Petroleum is found in increasing quantities in the Dutch East Indies, especially Sumatra and Java; it is particularly rich round Soerabaya.

30. This is one of the richest districts in the world agriculturally,—other produce being very varied and valuable, comprising arrack, arrowroot, areca palm, aloes-wood, birds' nests, betel, black pepper, cotton, coffee, cloves, camphor, cassia, cinnamon, cocoa, cubebs, cutch, cassava, copra, coir, cardamoms, canes, drugs, dyes, dye-woods, doll, dragon's blood, dammar, ebony, fruits, gambier, gums, gutta-percha, ginger, gram, gamboge, indiarubber, hemp, indigo, ivory, kapok, mace, maize, nutmeg, opium, oils, pepper, pasturage products, paddy, rice, rattans, sago, sandalwood, sapanwood, stick lac, sugar, spices, sweet potatoes, tobacco, teak, tea, tamarinds, tapioca, turmeric, teel seeds, and yams.

31. Specialties are—

Cloves from the Moluccas,—Amboina.

Hemp and *tobacco* from the Philippines.

Nutmegs from Banda.

Maize from Siam.

Rice and *teak* from Bangkok, Saigon, Bassein, Moulmein, Rangoon, &c.

Sugar from Java.

Spices from the Moluccas and islands generally.

Sago, pearled, from Singapore.

East Indian fruits are durian, guava, leeches, mango, pomegranate, papia fig, pine-apples, &c.

32. Local trade movements are entirely by sea and road. Railways are being projected throughout Farther India, and will facilitate the transit of merchandise. At present Singapore

acts as the emporium for all goods interchanged between East and West.

33. We learn from the statistics that in 1874 the exports to Great Britain were $2\frac{1}{2}$ millions, or a trifle more, and the imports $2\frac{1}{2}$ millions, or a little less. Direct trade with Java and Siam was comparatively insignificant.

In 1881 the population numbered nearly half a million. From 1881 to 1885 the total imports to the three settlements of Penang, Malacca, and Singapore averaged $19\frac{1}{2}$ millions a year, and the exports $17\frac{1}{2}$ millions sterling; the exports to Great Britain averaged $4\frac{1}{2}$ millions annually, and the imports from us were valued at $2\frac{1}{2}$ millions. The staple exports were tin ($1\frac{3}{8}$ millions), spices (1 million), gutta-percha (£325,000), catch and gambier (nearly half a million). The imports were cotton goods ($1\frac{3}{8}$ millions), coals (£170,000), and iron (£120,000).

Java turned over about £5,000,000 a year with Great Britain, but the direct trade with Java and Siam is unimportant.

34. Trade is increasing, for from 1874-84 the exports from the Straits nearly *doubled*, but imports *declined* 10 per cent. Yet out of a total turnover of £36,400,000, we, in 1881-85, only held one-fifth. Whether as an emporium between East and West, or as the land of spices and East Indian produce, the trade of the Straits Settlements is one to be encouraged.

This productive district, as one of our own possessions, is most valuable; still, our direct trade, with such an accumulation of produce and such a large turnover, is *too small* compared with the share taken by other countries. The quantity of produce absorbed by our other colonies must be set off against this, for the life of the trade of a colony should be vital also to the mother-country, the interests being identical.

Examination Questions on British and Farther India.

1. By what routes may India be reached? What further routes may be eventually opened? Describe the "overland route," and compute the distances to be traversed by each respective course.
2. Give some illustrations of the commerce between India and England, and describe the progress of India in home manufactures.
3. Name the ports of India, and show the constituents of the trade distinctive of each.
4. What are the commercial prospects of Burmah, and on what resources and capabilities are they founded?
5. What favourable circumstances have contributed to the rapid development of Singapore as the emporium of the far East?
6. Describe the distinctive resources of Farther India, with its distributing ports, or, if preferred, of the dependency of Ceylon.

C H I N A.

Political divisions, 1, 22—**Geographical position**, 2—**Geographical features**, 2, 3, 6-8; in relation to resources, 4—**Commercial position**, 2, 13—**Commercial activity**, 3, 5, 10, 11, 12—*Ebb and flow, with natural centres* and circulation of goods, 6-8, 16—The rivers of China, 3, 6, 7, 8; the navigation of same in relation to commercial activity, 5, 9, 12—*Characteristics of this trade*, 11—Climate, 13, 24; soil, 4, 13—Hong-Kong, advantage to England of the possession of, 14—Russian commercial advances, 15—Centres of distribution, 10, 16—The first introduction of railways, 17-21; notes and extracts hereon, 18-21—**Natural trade-area**, 22—**Mineral resources**, 23—**Agricultural products**, 24—Means of intercommunication, 25—**Trade statistics**, 26, 28—Review of the movements of Chinese trade from 1874 to 1885, 27; and of that of Hong-Kong from 1871-81, 29—**Examination questions**, p. 200.

1. **China** includes, besides the empire proper of that name, the extensive territories of Mongolia, Manchuria, Corea, and Thibet.

2. Commercially we have to consider only **China proper**, with its sea-board of some 3000 miles, and land frontiers adjoining Mongolia on the north, Thibet on the west, Burmah and Anam on the south-west and south. China is in direct trans-oceanic communication with America, and by the southern seas with all the Western nations. Lying on the extreme east of the Asiatic continent, the empire is washed by the Chinese, Eastern, and Yellow Seas, along whose shores she presents a scene of great commercial activity.

3. **The surface** is divided into plains and valleys by ranges of mountains and hills, running east and west, and therefore differing from the mountain-chains of the American continent,

which offer no obstacles to free intercourse between the sea and inland. The valleys and plains form the basins of a magnificent river system, connected in every direction by canals, and completing the most perfect network of waterways possessed by any civilised State.

4. The soil is largely alluvial, yielding a great variety of vegetable produce, while the lower depths are stored with immense mineral wealth. Every mineral and metal is represented except platinum, and the coalfields are reputed to be the largest in the Old World.

5. China is only partially open to foreign trade, but the people are instinctively commercial, and the interior is one living hive of industry and exchange. The fine harbours, inland water-communications, and resources of undefined value give grand promise of a future unrivalled commerce. Note specially that the people are already commercial, and the inland districts opened and active.

6. The natural flow of merchandise in China is easily readable; the river **Hoang-ho**, running through the extensive plain of China, divided from Mongolia by the In-shan and Kihan-shan Mountains, and from the basin of the Yang-tse-kiang by the Pe-ling range,—gives a *natural exit* to the Gulf of Pe-chi-li from a vast tract lying between these chains.

7. The **Yang-tse-kiang** is bounded north by the Pe-ling and south by the Nan-ling Mountains, and includes a rich plain with many commercial cities. Farther south the **Si-kiang** drains from Yunnan to the sea at Canton, the gravitation of goods being easterly down these river valleys.

8. The river **Sang-ka**, rising in Yunnan and flowing through Tonquin, gives an *international* waterway which may rise to much importance.

9. An important feature of the Chinese rivers is, that they are navigable even for large vessels many miles inland. The free port of Hankow on the Yang-tse-kiang is nearly 700 miles inland.

10. China abounds with large cities teeming with industrial

life ; yet, as a race, the Chinese are passive, awaiting the call of Western nations.

11. This country constitutes a market to which all commercial communities turn, and must eventually absorb enormous quantities of European goods, while throwing into our markets a rich and varied assortment of Eastern merchandise.

12. **The rivers must continue to be the natural highways**, but, when railways are generally introduced, town and city will join, and an extensive land trade be established with the West. There are certain **free ports** even now, and therefore China is tabulated as a separate trade-area ; but for commercial intercourse in proportion to her resources, **China is as yet unopened.**

13. This map, therefore, shows a large tract of country admirably adapted, by soil, climate, and intelligent labour, for agricultural activity, watered by fine rivers, with large and populous cities and towns, good harbours, and river-ports ; and our knowledge of the Chinese is that of an industrious and painstaking race.

14. Our possession of **Hong-Kong**, commanding the entrance to one of these great rivers, gives **England the advantage** of a storehouse or emporium *on the spot* ; so that, when China opens her doors wider to commerce, *England should be first.* Further, our dependency of India is close to South-West China, and should draw a large trade overland.

15. On the other hand, **Russia** is pressing onwards from Europe to the confines of China by railway, and thus will gain an opposition transit route inland for **Eastern merchandise** to Western Europe.

16. **The present open ports must be the great centres of the future**, for they are situated just at the gravitation end of each valley ; **Shanghai** is the natural inlet and outlet for the whole Yang-tse-kiang valley, and **Canton** for the Chu-kiang. The **Grand Canal** joining the Hoang-ho and Yang-tse-kiang makes **Shanghai** the converging point for both valleys, and therefore the great centre of all Chinese trade.

17. **The first Chinese railway** connects Tient-sin, Taku, and Tong-shan, a distance of 86½ miles, and though short, is a great factor in the future development of the system.

18. *This line opens upon the coal-region around Tong-shan, a significant movement in industrial activity.*

19. The land drained by the Pel-tang, Pei-ho, &c., is reported to be as flat as Holland, so that, beyond bridging and guarding against floods, few engineering difficulties were encountered.

20. "From Tong-shan, the limestone hills, softly undulating, are wondrously fertile. Fields of millet, hemp, and flax spread before the eye, and the humbler garden vegetables and fruits are abundantly cultivated. Not an inch of the rich loamy soil is lost, and the surface is thronged with thrifty blue-dressed workers from sunrise till dark. They are prosperous, well-housed, and contented, and might be pardoned for asking to be let alone, and for regarding the 'iron horse' with anxiety and suspicion.

21. *"The hard-wood Japanese sleepers, used just as cut, wear as well as the creosoted sleepers at home. Twenty to twenty-five miles an hour is the rate usually kept up, a speed bewildering to the slow-going Chinaman, whose ideas of rapid travelling are based upon his river-boats or hand-barrows. A paying traffic has already been developed. Bales of foreign piece-goods now reach their destination in a few hours, whereas, before, they arrived in cargo-boats, on mules or camels, or by those quaint conveyances seen only in China, one-wheeled barrows with sails. The branch will be extended to Tung-chow, sixty miles farther, and thence to Peking, when the triumph of the iron way will be complete."*¹

22. China is designated by its own title of "Chinese trade." The area approximates 1,300,000 square miles, increased by its dependencies—Mongolia, Manchuria, Corea, Thibet, Jungaria, and East Turkestan—to considerably more than four millions of miles. These "outliers" of China enter partially into other trade areas; but national prejudices

¹ Adapted from the correspondence of the *Standard*.

against the intrusion of strangers keeps them all, commercially, a "Dark Country," though destined as a field of new markets. For the time-being, their traffic cannot even be estimated.

23. Owing to our want of knowledge of the interior, the **mineral resources** of China cannot be accurately localised; but unworked coalfields, some of vast extent, are assumed to occur in each of the eighteen provinces.

24. Wide range of climate and productive soil ensure varied crops. Among **agricultural and other items** are barley, beans, cotton, castor-oil plant, camphor, coco-nut, chesnut, sapucia-nut, earth-nut, fig, fruit, flowers, hazel, indigo, mulberry, oak, bark, galls, pulse, potato, pomegranate, millet, rice, scented woods, silk, sugar, spices, tea, and wheat. Rice is the staple cereal. Tea, silk, and sugar are native products.

25. **Local trade movements**—entirely through the treaty ports. The unsurpassed facilities for internal traffic and the caravan routes from the west create a vast *home trade*, which must increase indefinitely with the general introduction of railways and the removal of embargoes on foreign commercial intercourse.

From the treaty ports ocean-lines of steamers leave for all parts of the world. The alternative route, *via* the Suez Canal or Vancouver,—Canadian Pacific,—are engaging the attention of commercial men. There are further routes *via* San Francisco or by a long sea-passage round "the Cape" or "the Horn."

26. There were in 1870 to 1874 no returns available to estimate with any degree of accuracy the area, population, or total trade of China. During this period the **exports to Great Britain** are given as averaging 11½ millions annually, and **imports** 5½ millions. The **staple exports** to us were tea (8½ millions, weighing about 127½ million lbs.), raw silk (2 millions), and cotton (£10,000). The **staple imports** from us were cotton goods (3½ millions) and woollens (£600,000).

In 1884 the area and population were still undetermined,

but estimated at 1,300,000 square miles and 385 millions of people.

In 1885 the total imports were about 23 and exports 17 millions; from 1881 to 1885 the exports to Great Britain averaged 10 millions a year, and the imports $4\frac{7}{8}$ millions. The staple exports were tea (6 millions, weighing $131\frac{1}{4}$ million lbs.) and silk (£1,000,000). The imports from us were cotton goods ($3\frac{3}{4}$ millions) and woollens (three-quarters of a million).

27. Thus between 1874 and 1885 the tendency of trade was *downwards*, there being a loss of about 14 per cent. on exports and 20 per cent. on imports. The tea export shows this most clearly, having fallen over 25 per cent., which is accounted for by the increased demand by England for Indian and Ceylon teas. Raw silk, too, *fell* 50 per cent. Our imports of cotton and woollen goods *rose* 10 per cent. and over 25 per cent. respectively. China probably will ere long be the great market of the East for the manufactures of the West.

28. The free port of Hong-Kong (an English possession) must be considered in describing Chinese trade, since the imports and exports are, to all intents and purposes, an extension of Chinese trade.

In 1871 the population was estimated at about 125,000. From 1870 to 1874 the total imports averaged 4 millions a year, and the exports half this amount; Great Britain drew of these exports £600,000, and supplied $3\frac{1}{4}$ millions of the imports. The staple export was tea, valued at two-thirds the whole of the exports to us.

In 1881 the population had increased to slightly over 160,000. From 1881 to 1885, the total trade movements were estimated at exactly the same figures as at the previous period; but the transactions with Great Britain were different, the exports averaging yearly $1\frac{1}{8}$ millions, and the imports $3\frac{3}{16}$ millions. The staple exports were tea (£400,000) and copper (£100,000); the imports were textiles (valued at $2\frac{1}{2}$ millions). Many, nay, most of these goods were "in transit;" Hong-Kong simply acting as an emporium entrepôt.

29. From this trade history, we learn that from 1871 to 1881 Hong-Kong *increased* about one-third in population; and although the total trade is estimated at a stationary point, England's transactions with her colony show a *very satisfactory rise*, the exports to England having *risen* nearly cent. per cent., and imports 5 per cent.

Tea export has been quiet at about the same figure, but copper is rising as a staple.

In looking for China to open her gates to free intercourse, we must not forget the advantage of England's possessions of Hong-Kong and Singapore.

JAPAN.

Geographical position, 1, 4 ; **divisions**, 1—**Geographical features**, 1, 4 ; **climate**, 2 ; **soil**, 3—**Commercial activity**, 3, 4, 6—**Commercial position**, 4—**Centres of distribution**, 5—*Characteristics of this trade*, 7—**Natural trade-area**, 8—**Mineral resources**, 9—**Localisation of the principal metals and minerals**, 10—**Agricultural resources**, 11—**Means of intercommunication**, 12—**Trade statistics**, 13—**Review of the movements of trade and population from 1873 to 1885**, 14—**Examination questions**, p. 200.

1. Japan consists of several isles lying off the Chinese coast, from which they are separated by the Sea of Japan ; washed on the east by the North Pacific Ocean, and on the north by the Sea of Okhotsk. The principal islands are **Nippon**, **Yesso**, **Shikoku**, **Kiusiu**, and **Sadow**. These islands extend through nearly sixteen degrees of latitude, and have a very uneven surface, interspersed with rocky mountains. In Nippon, the largest island, the high lands admit of cultivation even up to the watershed of the streams.

2. The **climate**, humid throughout the islands, varies considerably, being extremely cold in the north, while in the south, as warm as France.

3. By the untiring industry and skill of the natives, a poor soil has been enriched and the whole land made fruitful with the resources of husbandry. The hills are productive of considerable mineral wealth.

4. Since the Japanese have opened their ports, they have shown great activity in commercial matters, but as a rule they are copyists, and have but little originality.

The commercial position of the islands is excellent, connected so closely with China on the one hand, with

Canada and America on the other, and with India and the islands in the south; besides being open to the world's commerce by the various ports.

No distance separates any part of the interior from the coast; transit, therefore, is easy. These islands even now play important parts in the trade of the world, and will probably, by their influence on China, take yet a higher place.

5. Every island has its own central distributing point. When the Russian railway line is complete to Vladivostock, a large circulation of merchandise will doubtless set in between the Japanese islands and the West.

The area of each island being comparatively small, one large emporium on each is sufficient; to and from which goods ebb and flow. Thus **Hakodadi** serves *Yesso*; **Yokohama** supplies the capital and *Northern Nippon*, assisted in the south by the smaller port of **Hio-go**; while **Nagasaki** is the commercial centre of *Kiusiu*.

6. Some time back, the Japanese, as far as external trade was concerned, *were entirely passive*; now they may be called in a *transition state* between passive and active, and are yearly seeking further external commercial activity.

7. These islands are both customers and suppliers of **England**; they export raw materials and manufactured specialties, receiving in return all Western finished goods. Copying these goods, they are now striving to manufacture for themselves, and the tendency of this trade is for further independence in commercial matters among the inhabitants, for they are quick to recognise benefits of Western experience and invention.

8. "The trade of the Japanese islands" is closely allied to that of China, but as intercourse is now fairly free and open, international commercial activity is much greater.

The area of the islands approaches 150,000 square miles.

9. The mineral products consist of amber, asphalt, agate, antimony, coal, copper, carnelian, crystal, gold, iron, kaolin,

lead, mercury, mineral pitch, rock-crystal, silver, sulphur, and tin.

10. Gold is especially sought in Sadow. Lead and tin are of superior quality.

The mining of coal is the greatest mineral industry, followed by iron, copper, lead, tin, sulphur, gold, antimony, and silver.

11. Among agricultural and other products we find ardahee, bamboo, barley, beans, banana, camphor laurel, cotton, drugs, flax, fruits, genson, gall-nuts, ginger, indigo, mulberry, oils, oranges, palms, pomegranate, pepper, peas, paper mulberry, potatoes, pastures, rice, rapeseed, spices, sugar, silk, tea, tobacco, vegetable wax, varnish-trees, woods, and wheat.

The acreage under rice is about 6,750,000 acres; this cereal is the largest crop; followed by wheat, barley, and beans.

Pastures are considerable. Of the total cultivated acreage, rice covers about 55 per cent.

12. Local Trade Movements.—Except the short railway lines connecting the industrial and shipping centres, all movements are carried on by road and sea, coastwise, the country in no part lying far from the coast. There is, from the large seaports, direct and frequent communication by means of fine steamers with England, France, Belgium, Germany, Italy, India, China, Vancouver, and the United States.

13. Looking at statistics, we trace that the population in 1870 was about $32\frac{3}{4}$ millions in number, being equivalent to 210 to the square mile.

From 1870 to 1874 the total imports averaged some $5\frac{1}{2}$ millions a year, and the exports $4\frac{3}{10}$ millions, or rather better; these amounts are calculated at four shillings to the dollar. The chief imports were cotton and woollen goods, and exports, tea and silk. During this period the exports to Great Britain averaged £300,000 annually, and the imports from us $1\frac{1}{2}$ millions; the staples being rice (£235,000), tobacco (£80,000), outwards; cotton goods (five-eighths of a

million), iron (a quarter), and woollens (one-eighth of a million), inwards.

In 1885 the population rose to $37\frac{7}{8}$ millions, raising the density to 248 to the square mile.

From 1881 to 1885 the total imports averaged $5\frac{3}{8}$ and the exports $7\frac{1}{4}$ millions a year; of these England took £650,000 of the exports and $2\frac{1}{4}$ millions of the imports; the staples being silk (£7000, having fallen from £210,000 in 1884), earthenware (£25,000), tobacco (£130,000, having risen from £50,000 in 1884), oil (£13,000), drugs (£10,000—£16,000 in 1884 and £40,000 in 1881), copper (£36,000, risen from £620 in 1884), outwards; and cotton goods (1 million), woollens (£300,000), and iron (a trifle over a quarter of a million), inwards.

14. We thus deduce that from 1873 to 1885 the population largely increased, about 16 per cent. on 32 millions.

Trade has, during the same time, shown a marked rise; the total imports having risen fully 9 per cent. and the exports nearly 70 per cent.

English trade also shows a fair rise. In 1870-74 period we held only about 7 per cent. of the exports, and in 1881-85 we held 9 per cent., showing but a small increase. In 1870-74 we supplied well on for one-third of the imports; but in 1881-85 we only held 40 per cent. This shows that, *although our trade rose in the aggregate, proportionately we lost ground.*

With regard to imports, our staples of cotton rose 50 per cent., and woollen 133 per cent. Russia, Germany, and, recently, even India, compete with England in the supply of manufactures; but, with our possession of this new and widening market, judicious enterprise should enable us to maintain our position.

Examination Questions on China and Japan.

1. Contrast the industrial with the international commercial activity of the Chinese, and show the growth of enterprise in recent years.
2. Name the treaty ports ; show the special advantages of those ports which are situated far in the interior of the country.
3. What is the present condition of commerce between China and the United Kingdom ?
4. How is Japan placed for foreign trade ?
5. What are the commercial relations between Japan and England ? Name the ports.
6. Enumerate the chief natural resources of Japan, mineral and vegetable, entering into commerce, with the localities of their production.

NORTH AND CENTRAL ASIA.

Political divisions, 1—**Geographical position**, 1, 3-12—Commercial position, 1, 7, 9, 14—**Geographical features**, 1, 3-5, 7, 8, 10, 11, 12; in relation to resources, 2, 8, 13; and to commerce, 15—Climate, 1, 5, 9—Soil, 10, 13—Mongolia, 3; desert of Gobi, 4; the country of the Tsakhars, &c., 5; Thibet, 7; Turkestan, 8; Little Bokhara, 10; Manchuria, 11; Siberia, 12, 13; descriptions of.—Character of the inhabitants, 6, 9, 15; **Commercial activity**, 14, 15, 29; *Characteristics of this trade*, 16, 18, 29—*Ebb and flow, with natural centres*, 9, 15—The caravan depôts, 19; and centres of distribution, 19—Extracts and deductions with reference to the growth of our trade with Siberia, 20, 21—**Natural trade-area**, 22—**Mineral resources**, 2; of *Siberia*, 23; of *Turkestan* and *Tartary*, 25—Localisation of same, 2; of *Siberia*, 24; of *Turkestan* and *Tartary*, 25—**Agricultural resources of Siberia**, 26; of *Turkestan* and *Tartary*, 27—Means of intercommunication, 17, 28—**Trade statistics**, 29—**Examination questions**, p. 208.

1. This map includes **Mongolia, Thibet, Turkestan, Little Bokhara, Manchuria, and Siberia**, and consequently shows us the greater part of the Asiatic continent; that is, all the Russian territory in Asia, the independent States, and the Chinese Empire, but not China proper.

The land frontiers of these countries abut on States very far in advance as regards civilisation, progress, and commercial activity. Thus the *western* boundary is European Russia; the *southern* frontier joins that of our great dependency, India; and the *eastern* limit adjoins industrious, although restricted, China. The *northern* boundary is the Arctic Ocean. Through the vast Siberian territory to the Altai Mountains, and beyond to the Himalayas, where elevated tablelands abound, there are no obstacles to the piercing Arctic blasts sweeping across the country. On the other hand,

the Himalayas prevent the warm currents of the south reaching far north. To these causes, combined with the great salt deserts, must be attributed the existence of a wild, inhospitable region, only cultivable during a very short summer.

On the eastern shore, towards the waters of the Sea of Okhotsk, where the Amoor river, running from west to east instead of south to north, as do the other Siberian rivers, gives irrigation, cultivation is more advanced, the seaport towns are of more importance, and, commercially, are likely to advance.

2. The mountain-ranges teem with mineral wealth, from the finest plumbago in massive beds, and jasper of the rarest kind, to iron, limestone, and the minor metals.

3. Mongolia is an elevated district, lying between the Altai Mountains and those continuing to Manchuria and the mountains of Thibet, intersected by lofty land; the summits in many places being clothed with trees of various kinds. Numerous rivers water the country, and at intervals pastures and cultivated fields interrupt the monotony of sand and rough stony soil, of which the chief part of Mongolia consists.

4. The desert of Gobi, composed of arid yellow sand, is traversed from east to west by mountains less elevated than those of the north; the sterile soil, however, ceases at the southern end of the Gobi desert.

5. The country of the Tsakhars, Ordos, and other tribes who live to the south of the steppes is adapted for tillage. Nearer the great wall of China, the district of East Mongolia forms a fertile country. Great elevation and abundance of natron are probably causes accounting for the greater cold felt in Mongolia compared with other countries on the same latitude; but, cold as is the winter, the summer is almost as scorching as that of Arabia.

6. The people are nomadic, and for commerce, passive; their country can at present only be looked upon as a *transit region*.

7. Thibet is little known, the people being more exclusive than the Chinese. Their country, a region of tablelands, deep

valleys, and high mountains, is consequently closed to foreign trade. *Goods that filter through, as it were, surreptitiously, to Upper India demonstrate the resources of the country and the possibility of a new market for European goods.*

8. **Turkestan** is for the most part composed of sandy plains intersected by a few rivers; along their banks, and on the margin of the lakes, cultivation is carried on.

The Kirghiz steppes have an unequal surface, and there is a great want of water; but where this is obtainable, the land is fertile and the meadows are rich with herbage and gay with every kind of flower.

9. The climate is healthy, but subject to extremes of temperature. The people are pastoral, nomadic, and passive, and their country essentially a transit country, with natural gravitation viâ the Caspian.

10. Little Bokhara, a plain extending east from the Belur-Tagh, is well watered. The soil is fertile and well cultivated, the climate dry and healthy.

11. **Manchuria** has the river Amoor for a northern boundary and as a natural means of transit; a range of mountains skirts the coast from the mouth of the Amoor to the southern extremity of Corea, while a second range divides Manchuria from Mongolia. The greater part of this country, in the basin of the Amoor, is covered with fine forests, and has some valleys of considerable fertility. The eastern parts appear to be well cultivated; but, except as an overland transit-route, the country is hardly recognised by Western commercial circles.

12. **Siberia** may be described as an immense plain sloping upwards from the Arctic Ocean to the Altai and Ural Mountains, but so gradually as to be almost imperceptible. This plain consists almost entirely of steppes and marshes, intersected by large and sluggish rivers whose courses are impeded by the ice that piles up along the reaches for a considerable period of the year. The whole expanse is sterile, except for a few trees and the tundra grass.

13. **South Siberia** is more clement; it has wide pastures and

yields good cereal crops. Near Irkutsk agriculture flourishes ; on the Lena the soil is fertile, and produces plants of great size ; the banks of the Yenisei are rich and fertile ; round Lake Baikal the land is more hilly and fairly fertile ; while along the Amoor cultivation is very successfully pursued.

14. The position of Siberia shuts her out from external commerce, except for transit between Russia in Europe and China, and for a very short summer on the rivers ; but movements are now on foot to extend the European railways from Ekaterineburg to Vladivostock, on the Sea of Okhotsk, and to open up sea traffic as much as possible, which will throw the vast resources, almost of another world, into the commercial markets.

15. *At present, however, these districts do not play very important parts in commercial circles.* It is difficult to induce nomadic tribes to settle down to quiet agricultural or industrial life ; secondly, the people, with Eastern pertinacity, resist the advent of Western civilisation ; thirdly, the physical features, the deserts, and stupendous mountain-chains form serious difficulties in the way of trade in an active sense. Many changes must take place before the old caravan routes are everywhere replaced by the railway ; for this change means an adoption of Western forms, habits, and appliances. Lastly, the ice-bound regions of the north preclude river-traffic except for a few brief summer weeks.

The lands bordering the Caspian Sea and Thibet appear the first to move. The development of Chinese enterprise must do much to open out Thibet, from whose high lands the natural flow of merchandise will be by India ; while round the Caspian and by the Oxus the Russian railways are connecting-links with the European systems.

16. These countries have immense resources of raw materials ; but they are so enclosed, geographically, that direct British trade must be very limited, and in many parts well-nigh impossible.

17. The approach to Siberia by the northern rivers can be only in the summer. Other approaches are by the Amoor, by

Vladivostock, by China, and by European Russia. Mongolia and Manchuria are reached through China; Thibet and Turkestan by way of India. Our possessions should profit by new developments of the transit-trade, but the effect upon *direct* English commerce is difficult to forecast.

18. There are no manufactures in these countries. All finished goods must be obtained from other lands in exchange for native raw materials; and markets, therefore, must open out for Western wares.

19. Caravan depôts, acting as centres of distribution, are numerous. Goods, however, arrive from so many parts, and are so handed about from one place to another, that it would be hazardous to lay down a law for the circulation of merchandise. Yarkand, Tomsk, Yashkend, and Khojend are leading centres or emporiums of the caravan trade, and, with the seaports, indicate the direction of commercial movements.

20. The dangers of the Arctic approach to Siberia, as a permanent channel of commerce, have allured rather than scared mariners, and frequent attempts have been made for many years past to establish direct intercourse, but the results have proved unsatisfactory. The unwearied exertions of Captain Wiggins have proved that able seamanship and experience can take advantage of the transient two months of summer and solve this problem. If this skilful navigator, in the repetition of his enterprise, shows that his success is not the happy chance of an exceptional season, when the Kara Sea was comparatively free from floating masses of ice, he will have opened up a sea-route to the great Siberian rivers, and thus obtained an outlet for Siberian produce, with a new and promising market for European goods.

21. Captain Wiggins computes that, by sailing from the Tyne in the middle of July, in about thirty days he may reach the mouth of the Yenisei; whence (transshipping to the river-steamship in waiting, while reciprocally taking on board the cargo of that vessel) the river-steamer proceeds 2000 miles up the stream to the town of Yeniseisk, and the British vessel

returns. Thus the outward and homeward cargoes will be carried while the seas are navigable. Should Captain Wiggins open up this new route of trade, he will have at his disposal, for commercial relations with Europe, the territory of the Obi, extending from north to south 1260 miles, and from east to west 1530 miles. The southern division of this territory is one of the most fertile and productive parts of Western Siberia; and it must not be forgotten that "no country in the world is richer than the vast Asiatic region which is generally associated in the outside world with eternal snow and frost."

22. **Siberia, Turkestan, and Tartary** belong to the "North and Central Asian" trade. There is no *direct* intercourse with Great Britain, except from one or two new ports on the east coast of Siberia; the whole trade is carried on, in transit, through other countries.

By Tartary is meant Bokhara, Khiva, and the Trans-Caspian districts, an area extending *through the temperate to the frigid zone*.

23. Although **Siberia** for the most part is not well explored, the following valuable **minerals** are known to exist:—Arsenic, asbestos, antimony, amethyst, argentiferous lead, beryl, copper, diamonds, emerald,—fossil ivory,—graphite, gold, glauher salt, iron, jasper, lapis lazuli, lead, mica, malachite, marble, porphyry, platinum, quicksilver, ruby, silver, sulphur, salt, talc, tin, topaz, and zinc.

24. The leading **mining districts** are the Ural Mountains, Altai Mountains,—Bernaul,—and Nertschinsk, in the basin of the Amoor.

Gold in the Urals, Tomsk, Yeniseisk, and Jablonnor Mountains.

Jasper and **porphyry** exist in large quantities at Charysh and Koryvan.

Lapis lazuli in Lake Baikal.

Malachite generally.

Plumbago in the mountains, which exhibit some of the finest deposits in the world.

Quicksilver and lead, topaz and emeralds, at Nertschinsk.

25. **Turkestan and Tartary** yield alum, asbestos, agate, asphalt, coal, copper, gold, jasper, lapis lazuli, nitre, naphtha, ruby, sapphire, sal ammoniac, sulphur, and salt.

Jasper in large quantities in the extreme east, all sent to China.

26. **Siberia** is for the most part in the Arctic zone, and from the adverse climatic and physical conditions, already described, agriculture, in a trade sense, is impossible.

The chief growth is "tundra" grass; yet in the most sheltered places, on the banks of the rivers in the summer, and between the latitudes of 54° and 60° agricultural pursuits are carried on; crops of barley, oats, and rye are grown, and on the east coast most European cereals thrive.

Furs, swansdown, skins, hides, leather, and fishing are staple productions and industries of this area.

27. **Turkestan and Tartary** are fruitful, and yield barley, cotton, dye-plants, flax, hemp, melons and gourds, mulberry, maize, millet, madder, oil-seeds, pulse, pomegranate, pastures for cattle-rearing,—which is the great industry,—rice, silk, sesame, tobacco, the vine, wheat, and zedoary seeds.

28. **Local Trade Movements.**—Merchandise is conveyed by *caravan* along the great routes running from west to east and north to south; intercourse is maintained thus with Russia in Europe, Persia, India, and the Chinese Empire. In summer the Siberian rivers are busy with transport, and in winter sleighs take the place of boats.

There are no railways in all this area east of the Urals, except from Ekaterineburg to Perm, and from the Caspian to the Oxus, although they are projected in more than one direction.

Siberia is connected with Russia either *viâ* Ekaterineburg and Perm, or farther south by Orenburg or the Caspian, and with China by Kiatcha.

The routes from **Turkestan** are *viâ* Samarcand or Bokhara to the railway which runs from the Oxus to Merv and the

Caspian ; or by caravan to Meshed and Teheran into Persia ; or to India by caravan through Balkh and Cabul ; into Siberia by direct line from Tashkend or Bokhara ; and to the East by Kashgar and Kuldja.

29. There are no trade returns ; hence comparisons cannot be drawn. The Russian trade must increase, if the lines of railway, projected through Siberia, be accomplished ; and then it ought to *yield a share to our mercantile marine*, both at the terminus in the eastern seas and also in the ports westwards of the White and Baltic Seas.

Examination Questions on North and Central Asia.

1. What regions, within North and Central Asia, have any industrial significance ?
2. Where is Thibet situated ? What do we know of its resources ?
3. What may be the prospective commercial uses of the Siberian rivers ? Name the chief towns on their banks.
4. Give in detail the productive resources of this region, indicating such as are specialties, also the centres to which merchandise gravitates.
5. What efforts have been recently made to open up Siberian trade *via* the Arctic Ocean ?
6. How is the opening of the through-railway line in Siberia likely to affect English commerce ?

TIONS EXCLUDED).

INDUSTRIES.	INDUSTRIES.	INDUSTRIES.
<p>...ds and match- ...cks (a, b)—dag- ...rs, cutlery, glass, ...pperware, pot- ...ry, gold brocade ...).</p>	<p>Cotton stuffs and dried fruit (a, b)— reed pens (b).</p>	<p>Woollen stuffs (a, b) —felt for tents (a) — <i>shawls</i>, handmade car- pets, silks, lea- ther, pearl and coral fishery.</p>
<p>...s, cutlery, glazed ...rthen jars, gun- ...blder.</p>	<p>Reed pens.</p>	<p>Turbans, coral- fishery (Oman).</p>
<p>...roidery (gold and ...ver), swords, cut- ...ry (Asia Minor).</p>	<p>Dried grapes, figs, cotton-cloth, char- coal.</p>	<p>Carpets, silks, sponge-fishery, Turkey lea- ther.</p>
<p>...cious stones and ...asper-work (Bok- ...spera, b) — swords Jaucasus).</p>	<p>Cotton stuffs (Turkestan).</p>	<p>Silk stuffs (Tur- kestan), dried fish (Kam- tschatka).</p>
<p>...fine engravings, ...atings, jade orna- ...ents, porcelain.</p>	<p>Embroidery, lackered and bamboo work, wood-carving, screen-painting, cot- ton stuffs, rice and bamboo paper, Nan- kin calico, calico prints (all a).</p>	<p>Flowered satins, rich silks, ivory carvings (chess- men, pagodas, &c.) — <i>orange</i> (a).</p>
<p>...pleague work, swords, ...pears, cutlery, un- ...lazed earthen- ...ware, carpenters' ...elops (a, b).</p>	<p>Bamboo and cane (rattan) goods— varnishes, Tonquin bean (for snuff), wood-turning, cot- ton goods (a, b).</p>	<p>Ivory-ware (a, b).</p>
<p>...celain, glass, op- ...ckical instruments, Eutonwork, clocks, ...eelwork.</p>	<p>Rice-paper, japanned and lackered wares, cotton goods, bamboo and fancy articles, soft- rush mats, &c. (a).</p>	<p>Silk fabrics (a).</p>
<p>...n ...pa ...te, d ...art ...s ...g ...nace ...mon ...s (a)</p>	<p>Rattans (cane goods), soft-rush mats and chair-bottoms, marking-nut (a)— Manilla cigars, hats and muslins of Manilla hemp (Philippines).</p>	<p>...</p>
FOOT	MINERAL.	VEGETABLE.
		ANIMAL.

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1

AFRICA.

NORTH AFRICA.

Geographical position, 1—Political divisions, 1—Contrast between countries lying on the south and those lying on the north shores of the Mediterranean, 1a—**Geographical features**, 2, 3, 5, 7, 8, 9—Morocco, 3; Algeria, 5, 6, 17; Tunis, 7; Tripoli, 8; Egypt, 9; description of position, features, soil, and climate.—Soil and climate in relation to industrial life, 15—The harbours of Morocco, 4—**Commercial activity**, 7, 8, 16, 19, 20, 27—The overflowing of the Nile in relation to agriculture, 11—Description of the natural features of the Nile, 12—Faïoum, 10, 13—The Isthmus of Suez, 14, 20—*Ebb and flow to natural centres*, with circulation of merchandise, 18—*Characteristics of this trade*, 16, 17, 19, 20—The ports of Morocco, 21; of Algeria, 22; of Tunis, 24; of Tripoli, 25; of Egypt, 26—Centres of distribution in Morocco, 21; in Algeria, 22, 23; in Tunis, 24; in Tripoli, 25; in Egypt, 26—Connection with interior Africa, 27—**Natural area of trade**, 28—**Mineral resources of Morocco**, 29c; of *Algeria*, 29; of *Tunis*, 29a; and of *Tripoli*, 29b—**Agricultural resources of Morocco**, 30c; of *Algeria*, 30; of *Tunis*, 30a; and of *Tripoli*, 30b—**Fisheries**, 31—Means of intercommunication, 18, 20, 27, 32—**Trade statistics of Morocco**, 33; of *Algeria*, 35; of *Egypt*, 37—Review of the movements of trade and population in Morocco from 1873 to 1885, 34; in Algeria from 1872 to 1885, 36; and in Egypt from 1875 to 1884, 38—Tunis and Tripoli, 39—**Examination questions**, p. 226.

1. North Africa comprises all the Mediterranean States—Morocco, Algeria, Tunis, Tripoli, and Egypt—included between the Atlantic coast and the Red Sea, bounded southwards by an undefined line as far inland as civilisation reaches, and merging at length in the great Desert of Sahara.

a. *The maritime position of this area is analogous to the opposite shores of Southern Europe.* There are, however, conditions which quite alter the phase of its commercial activity. In Europe every degree inland leads to temperate and cooler

regions, and to the most enterprising races of the earth; whereas, in Africa, every degree southwards brings us nearer the equator, and, consequently, among the most passive of the world's inhabitants; and after some distance, we enter upon the inhospitable and almost unknown wastes of Central Africa. There are no arid sands in Europe, but populous cities, well-cultivated tracts, and nature's domain is worked and utilised to the best of man's intelligence.

2. **The Atlas Mountains**, with their mineral stores, form the nucleus of the Western States. From these mountains and their interjacent valleys there is a border of level land on either side, varying in width, gently sloping to the Atlantic, Mediterranean, or the desert.

3. **Morocco**, lying in the far west, is washed by the Atlantic and Mediterranean on the *west* and *north*; on the *south* her frontiers touch the Sahara, while on the *east* she abuts on Algeria. From the sea to the mountains the country rises by three great steps, further divided into three regions or districts by the rivers Sebos and Omerburgh. The first, from the sea and Sebos river to the hills, is an almost level plain; between the rivers the country dips, and, below the Omerburgh, falls still farther, until it is lost in the wilderness. There are but few trees; but the soil has marvellous capabilities, and, with careful irrigation, the whole land might become one highly productive corn-field.

4. **Harbours are fairly numerous.** *The approaches are, however, unsafe in almost every instance.* Harbour works would do much to raise Morocco to a good position among commercial States. The restrictions of rulers until now have acted detrimentally to free and extended trade.

5. **Algeria**,—mountainous, with much mineral wealth,—consists principally of ridges and branches of the Atlas, which enclose plains and valleys sloping to the *northern* boundary, the Mediterranean Sea; on the *south* Algeria joins the Sahara, and on the *west* and *east* is in touch with Morocco and Tunis. There are many rich tracts of fertile soil, especially in the

western province, watered by the Shelif, and the "Tell of Algeria."

6. The climate is temperate and salubrious on the high lands, but unhealthy on the marshy plains.

7. The small State of Tunis, the ancient Carthagina, lies to the east of Algeria, joining Tripoli at the south-east corner. "The fertility of the soil surpasses belief;" yet, except near the towns, where there are well-watered and cultivated plains of considerable extent, agriculture is neglected.

8. In Tripoli, the desert presses forward to the sea, leaving only a few fertile tracts along the shore.

Farther east, the country increases in sterility up to the confines of Egypt. Most of these districts are peopled by Europeans, who conduct all commerce, the natives being passive.

9. Egypt completes the northern countries, having, *south* and *west*, the deserts of Nubia and Central Africa. It is watered by that magnificent river, the Nile, which runs in a northerly direction, and has its embouchure and "delta" on the Mediterranean.

10. Only about one-tenth of the area of Egypt is cultivable soil; salt-marshes, sandy plains, rocky and bare mountains occupy the remainder. The cultivated land lies in the valley of the Nile, and is from eight to ten miles in breadth; a plain stretches some 150 miles along the coast and inland to the river.

There is also the fertile district of Faïoum, watered by lakes and a branch of the Nile.

11. The breadth of the cultivable land on either side of the river is entirely dependent upon the extent of the inundation; this breadth is, however, enlarging on the average, because the bed of the river is rising.

12. The banks of the Nile are flanked, on either side, by ranges of mountains, which follow the course of the river from the first cataract to near Cairo, where they diverge, one branch running near Alexandria, and the other to the head of the Red Sea. The banks of the river are covered, after the inun-

dations, with the richest verdure and most luxuriant crops. From the point where the mountains diverge to the sea lies the alluvial plain of Lower Egypt, almost a dead level, well irrigated and assiduously cultivated.

13. The district of Faioum has been converted, by irrigation, into a veritable garden, and is the most fertile and beautiful province in Egypt. Beyond the limits of the cultivated districts extend the deserts.

14. The Isthmus of Suez is a tract of low-lying sandy land gradually sloping from the Red Sea to the Mediterranean.

15. From the nature of the surface and the general aridity of the surrounding deserts, the climate of Egypt is hotter than that of most countries similarly placed as regards latitude.

16. These States carry on a few industrial specialties, but, differing from England, they import fabricated and finished goods, sending raw materials in exchange.

17. Algeria is the most active of the Barbary States, although extensive maritime business is maintained with many parts of the *entire* coast.

18. Gravitation is to the seaports. Transit is effected solely by caravan, except in Algeria and a few parts of Tunis, where railways have been introduced. From the Mediterranean ports, the whole world, east and west, is accessible, while South Europe is within a few hours' passage. A large transit-trade, also, is pursued with the interior; inland, raw materials being met by manufactured requirements, stored at the caravan depôts.

The absence of quicker means of transit and transport, capital and labour, both on the soil and in the harbours, especially in Morocco, Tunis, and Tripoli, militates against the economic and commercial prosperity of these States, geographically so well placed.

19. Egypt is largely a transit country, the key between the East and the West. Before the opening of the Suez Canal all goods had to be landed on the one sea-board or the other, transported across the Isthmus, and again shipped; and many

merchants, to avoid this expense, sent their merchandise by the alternative route *via* the Cape.

20. Since the opening of the Suez Canal, Egypt has again become the great highway from Europe to Asia and the East. *The Nile and the Canal are the channels of communication, while caravans convey goods to and from the ports and the inland parts of Africa.*

21. Each State has its port or ports, and large towns or emporiums, with markets for the caravans. **Morocco** possesses **Mogadore** for Morocco city and Terudant; **Saffi**; **Mazagan** for the river Omerburgh; **Robat**; **Mehedia** for the Sebos and Fez; **Tangier**; and **Tetuan**;—inland centres being **Terudant**, the first point touched by the caravans; **Morocco**, **Fez**; **Tedla** and **Taflet**, both important caravan depôts; and **Figbig**, a sort of border emporium between the desert, Morocco, and Algeria.

22. **Algeria** has ports in **Algiers** for **Blidah**; **Oran** for the western districts; **Arzeu**; **Mostaganem** for the river Shelif; **Bougiah** and **Phillippeville** for Constantine.

23. Inland, besides the places named, are **Tlemcen**, a border entrepôt between Algeria and Morocco; **Orleansville**; **Taguin** and **El Wataia**; besides **Tugurt**, **El Wed**, and **Wergala**, caravan depôts on the south of the Atlas Mountains.

24. **Tunis** has its central point in **Tunis**, followed by **Bizerta**, **Susa**, **Sfax**, and **Cabes**, and the inland towns of **Keff**, **Beja**, **Kairwan**, and **Nefta**, all caravan depôts.

25. **Tripoli** has the town of **Tripoli** as its great centre, for all purposes.

26. **Egypt** has its distributing centres in the ports of **Alexandria**, **Port Said**, **Damietta**, and **Suez**; and the towns of **Cairo**, **Siout**, **Kenneh**, &c.

27. All these places are in direct correspondence with **Murzuk** in Fezzan, said to be one of the *greatest caravan junctions* in North Central Africa; they act also as distributing centres for their own immediate circles, and pass goods on from centre to centre.

28. North Africa gives its produce to the "Mediterranean

trade." Morocco is partly in the West African area, and Egypt in that of the Red Sea. The whole region is within the warm temperate and the sub-tropical zones.

29. Mineral Resources.—**Algeria** has rich deposits of antimony, baryte, copper, cinnabar, iron, lead, nitre, potter's clay, clay, quicksilver, salt, silver, talc, and zinc.

Copper, iron, and lead are the only resources much worked as yet.

a. Tunis has alum, lead, natron, and salt, but little worked ; while

b. Tripoli has no economic minerals, except infusorial earth or Tripoli powder.

c. Morocco has excellent copper-mines in the South Atlas Mountains,—amethysts, antimony near Tedla, &c.,—but the resources of this country are barely known as yet.

30. Agriculture is receiving great attention in **Algeria** ; produce consists of barley for malting, dates, esparto, flax, forest wood, hemp, millet, oats, olives, olive-oil, pasture-grass, perfume flowers, roses, tobacco, the vine, and wheat.

45,000,000 acres are colonised ; 7,300,000 being under wheat, barley, oats, and millet, 113,000 under the vine, 19,800 under tobacco, and 5,000,000 under forest.

a. Tripoli yields, where irrigated, and especially along a fifteen-mile margin by the shore, almonds, barley, dates, esparto, figs, henna, millet, maize, madder, olives, olive-oil, orange, pepper, pomegranate, palms, pastures, &c.

b. Tunis gives barley, cotton, dyes, drugs, dates, esparto, flowers, indigo, maize, millet, opium, olive-oil, perfume flowers, saffron, timber, wheat, &c.

c. Morocco produces almonds, anise, barley, beans, chick-pea, capers, colocynth, cardamoms, coriander, cumin, dates, esparto, fruits, forest wood, gums, liquorice, millet, maize, manna, olive-oil, oak,—cork and bark,—orchilla, pimento, sugar, seeds, saffron, wax, and wheat.

31. The **sponge-fisheries** are important along the coast, and more particularly off the **Tunisian** shores.

32. **Local trade movements** with the interior, or **African intermediate zone**, are entirely by *caravan*. Along the Mediterranean shores, *railway* enterprise has accomplished something, but the lines are only *coastwise*, the inland places being yet deprived of this means of transit.

Regular lines of steamers run from the Morocco and Algerian ports to England, France, &c., while many "occasional" ships load cargoes from the ore and esparto circles of Oran, Mostaganem, &c., and barley and beans from Algiers and Morocco.

As means of transit and communication extend, there is every prospect of a largely increased trade.

33. There are no authentic returns for the population and area of Morocco. In 1873 the total imports were valued at a little over three-quarters of a million, and the exports at $1\frac{1}{2}$ millions. From 1870 to 1874 the exports to Great Britain averaged three-fifths of a million a year, and the imports a quarter of a million. The staple exports were beans and maize (£370,000) and olive-oil (£70,000); the imports consisting almost exclusively of cotton goods (£275,000).

In 1885 the total imports had risen to $1\frac{1}{4}$ millions, while the exports had dropped to slightly over 1 million; English contribution to the imports being exactly the same as in the 1870 to 1874 period, but the exports had dropped to a trifle over £300,000. The chief exports were beans and maize (£240,000), olive-oil (£70,000), and gums (£25,000) the imports were again cotton goods (valued at £365,000).

34. From this sketch we see that from 1873 to 1885 the total imports *improved* nearly 50 per cent., while the exports *fell away* about 30 per cent. In 1870 to 1874 Great Britain held 40 per cent. of the exports and quite a quarter of the imports, while in 1881 to 1885 we only held 27 per cent. of the exports and barely 25 per cent. of imports.

Fiscal restrictions bar trade; but there is a large opening for commercial intercourse.

All the staples of export *declined* somewhat between 1874 and 1884, but the cotton import *rose* nearly 40 per cent. A

little capital judiciously expended on the harbours, which are difficult of approach owing to the sand, would, with less restricted intercourse, soon lead to a very extended trade with this country.

35. Algeria in 1872 had a population of about $2\frac{1}{2}$ millions; in the same year there were just over 5 million acres under cultivation.

From 1869 to 1873 the total imports averaged $7\frac{1}{2}$ millions annually, and exports $5\frac{1}{4}$ millions; about four-fifths of the entire trade was with France.

From 1870 to 1874 England shared in the exports to the extent of half a million a year, and contributed imports valued at less than £100,000. The staple exports to us were esparto (a quarter of a million), corn (one-eighth of a million), and iron ore (less than £100,000); the imports were chiefly coals (£50,000).

In 1885 the population had risen to $3\frac{7}{8}$ millions. From 1881 to 1885 the total imports averaged $9\frac{7}{8}$ millions yearly, of which England contributed £320,000; exports averaged $6\frac{3}{4}$ millions, seven-eighths of a million being sent to us. France held about two-thirds of the whole trade. Our exports consisted mainly of esparto (nearly half a million), iron ore (£135,000), copper ore, lead ore, and barley (a quarter of a million). The imports were cotton goods (a quarter of a million) and coals (something over £60,000).

36. We thus deduce that from 1872 to 1885 the population increased just over 50 per cent.; that the total imports from 1869 to 1885 rose just upon one-third, and the exports rather better than a fifth.

In the first period Great Britain shared in the exports to the extent of 9 per cent., and imports only 1.2 per cent. In the 1881 to 1885 term the exports to England had risen nearly 70 per cent., and imports increased fourfold; during this period we held nearly 12 per cent. of the exports and about 3 per cent. of the imports; this shows a large and satisfactory rise, and we competed favourably with France.

With regard to staple exports, esparto and barley nearly *doubled*,—while iron ore *rose* over 50 per cent. ; these, in late years, have been supplemented by lead and copper ore.

Looking at the staple imports, coals *rose* nearly 50 per cent., and cotton goods formed 75 per cent. of the total imports.

Trade with Algeria is likely to increase considerably as further explorations are made inland, for both climate and soil are good.

37. **Egypt** in 1875 had a population of about 17 millions, estimated to be equal to twelve to the square mile.

In 1874 the total imports and exports were about 30 millions, being largely made up of merchandise "in transit." From 1870 to 1874 Great Britain shared in the exports to the extent of 14½ millions a year, and furnished of the imports 6½ millions; the staples being raw cotton, 7¼ millions,—the average from 1865 to 1869 was 9, and from 1870 to 1873 7¼ millions,—outwards; and cotton goods, largely "through," 2 millions inwards.

In 1884 the population was 6¾ millions,—a large decrease, owing to the disconnection of various States from Egypt.

From 1880 to 1885 the total imports averaged 8 millions annually,—of these England supplied 3 millions; the exports averaged 12½ millions, 9½ of which were sent to England. The staple exports were cotton (5¾ millions), cotton-seed (1¾ millions), grain and flour (£850,000), sugar (£160,000), and gums (£80,000); the imports being cotton goods (1½ millions), coal (half a million), iron (£375,000), and machinery (close upon a quarter of a million).

38. Thus we are unable to compare the population at the two periods 1875–1884, owing to the changes in the area consequent on the tributary States, &c., throwing off their allegiance and acting for themselves.

Apparently the total trade *declined* 33 per cent. between 1870 and 1885, but this is easily accounted for, much of the merchandise being sent "*in transitu*." Before the opening of the Suez Canal all goods had to be discharged at Alexandria or Port Said, and sent across to Suez for shipment again; all

these were included in the Egyptian returns as goods sent to and from Egypt, and were not treated solely as transit goods.

The direct trade with England, for a similar reason, seems to have *declined* quite 33 per cent. for *exports* from Egypt, and 50 per cent. on *imports* to Egypt.

Cotton *fell away* about 33 per cent. on the average; but, on the other hand, cotton-seed, gums, sugar, and grain are *growing* staples.

Cotton manufactures imported seem *stationary*, but coals for steamship bunkering, for the railways, &c., and machinery, are important factors in our trade.

Egyptian trade must always be an important and expansive one to England.

39. Tunis and Tripoli have no separate trade returns.

NUBIA, ABYSSINIA.

Geographical position, 1—**Geographical features of Nubia**, 2; **climate**, 3; of *Abyssinia*, 4; and **climate**, 5—**Economic resources**, 2, 3, 4, 6—**Commercial activity of Nubia**, 7; and of *Abyssinia*, 8—**Centres of distribution in Nubia**, 7; and in *Abyssinia*, 8, 10—**Natural trade-area**, 11—**Mineral resources of Arabia**, 12; of *Egypt* and *Nubia*, 12a; and of *Abyssinia*, 12b—**Agricultural resources of Arabia**, 13; of *Egypt*, 13a; of *Nubia*, 13b; and of *Abyssinia*, 13c—**Means of intercommunication**, 9, 14—**Review of trade**, 15—**Examination questions**, p. 226.

1. These two countries, lying to the south of Egypt, are washed by the Red Sea; while, on the land side, the country stretches westwards to the great desert. To the south is a desert land joining Ajan, on the east coast proper.

2. **Nubia** consists for the most part of frightful deserts, one on the west and one on the east, divided by the valley of the Nile, which, though deprived, through the height of the banks, of the regular inundations, contains some districts and isolated spots in the river, where a high degree of fertility rewards irrigation. The southern part is watered by the river itself, and the surface is covered with extensive "savannahs" of grass and mimosa.

3. The climate is intolerably hot, the rainy season lasting from June to September.

The whole country seems devoid of economic resources, both mineral and agricultural, except rock-salt and the produce of a few patches of fruitful irrigated ground.

4. **Abyssinia**, however, presents a different appearance, being a tableland gently inclined to the north-west, with two declivities on the eastern and southern sides, the one sloping to the Red Sea, the other towards interior Africa.

There are several ranges of mountains which indicate the presence of mineral wealth; there is, too, an extensive salt-plain to the south-east.

5. Although nearer the equator, the climate is cooler than that of Nubia and Egypt, owing to the elevation. The soil is fertile, and varied produce easily obtainable.

6. Abyssinia is the true home of the coffee-shrub, and, considering elevation, it is possible to cultivate profitably products from the temperate to the tropical zones. Except the Nile and its affluents, there are no rivers in these districts.

7. Nubia does not enter the category of commercial States; its great *gravitating* route is, of course, by the Nile to Egypt, yet it has a centre on the Red Sea in Suakim, but this is a port more for *military* than for *commercial* purposes at present, although it connects by caravan route with Abyssinia, and has some traffic with Arabia across the sea.

8. For commercial purposes, Abyssinia is fairly placed, if only *possessed of a good harbour, and with increasing internal means of communication, should yield a good return*, for the products are varied and valuable.

9. At present all transit is by *caravan routes*, and the *gravitation* is to the Nile on the one hand, and the Red Sea on the other.

10. The *centres* for caravan and sea distribution are Massowah, Hanfla, and Tajurrah on the coast; Adowa, Gondar, Gudara, &c., in the interior.

11. West Arabia, Abyssinia, Nubia, and part of Egypt go to constitute commercially the "Red Sea trade." Where ease of transit makes the Nile the waterway for merchandise, the goods so carried help the "*Mediterranean trade*." *This is an area which does not agree geographically and commercially*; we have, however, considered it advisable to describe the resources under the commercial rather than the purely geographical aspect. Hence, Arabia is introduced, although it lies in Asia. The whole area lies within the *palm and torrid zones*.

12. Arabia is separated from the plateau of South-East

Syria by detached chains of barren rock, and the **mineral resources** are scanty, but traces of mineral pitch, petroleum,—in the interior highlands,—saltpetre, salt, sulphur (Hadramant), stones,—agate, carnelian, and onyx,—occur; copper, iron, and lead are not abundant.

a. **Egypt and Nubia** are not sources of much mineral wealth, if we except the porphyry of Gebel Dokhar; although alabaster, basalt (Assouan), breccia, bitumen, emeralds, granite, a little gold, iron in the Nubian deserts, marbles, natron, nummulitic limestone, red granite, limestone, nitre, petroleum, sal ammoniac, soda, syenite, sandstone, salt, sulphur, and precious stones are found here and there.

b. **Abyssinia** is a rich field of mineral resources, but hardly yet developed; we find, however, coal, emeralds, gold, iron, salt, silver, and sulphur in considerable abundance.

13. Among agricultural and other products, **Arabia** yields aloes, barley, balsam, beans, castor-oil plant, coco-palm, coffee, date-palm, drugs, durra, frankincense, gums, kath-bush,—similar to coca,—lentils, myrrh, melons and gourds, millet, mastic, rice, sesame, tobacco, and wheat.

Millet is the staple "grain." It is only on a comparatively narrow strip of land, well irrigated, that agriculture is prosperously carried on. The valleys are fertile; the nearer the sea and the hotter the climate, the more luxuriant the growth.

The **palm** grows along this strip; **coffee** (Mocha) in Yemen.

The rearing of horses, mules, &c., is very important.

a. **Egypt** yields acacia, barley, beans, cotton, cotton-seed, coffee, dari, dates, figs, gums, hemp, ivory from the interior, lentils, millet, maize, melons and gourds, rice, sugar, senna, tobacco, and wheat. Trees are scarce; only the acacia, fig, sycamore, and tamarind-palm flourish.

b. **Nubia** gives chick-pea, dari, ebony, baobab, lemon, palm, and sycamore.

c. **Abyssinia** has a prolific growth of barley, cotton, coffee,

citron, and other fruits, flax, gums, maize, millet, sugar, sycamore, tobacco, the vine, wheat, and other products.

Two, and sometimes three, harvests of grain can be gathered in a year.

14. **Local trade movements** are entirely by *caravan*, *coast-wise*, or by the *river Nile*. The caravan routes run from the interior to the African continent.

15. **Trade Statistics.**—There are no published trade returns for any of these countries except Egypt. Returns of Egypt proper are given under "Egypt" in the North African division, p. 217.

EAST AFRICA.

Geographical position, 1—**Commercial position**, 1, 3, 5, 10—Divisions of the "coast," 2-4—**Commercial activity**, 3, 11, 15—The harbours, 4, 10—**Ajan**, 5; **Zanzibar**, 6; **Mozambique**, 7; descriptions of.—**Soil and climate**, 6, 8—The rivers, 9—*Characteristics of this trade*, 10, 12, 14—*Gravitation points* and centres of distribution, 13—**Natural trade-area**, 16—**Mineral resources**, 17—**Agricultural resources**, 18—Means of intercommunication, 19—**Examination questions**, p. 226.

1. **East Africa** includes all the eastern side of the continent from **Cape Guardafui**, at the entrance of the Gulf of Aden, to **Delagoa Bay**. This district is bounded on the *east* by the Indian Ocean, on the *north* by the Gulf of Aden, and Abyssinia; on the *south* by the area of Southern Africa; on the *west*, the boundary is an undefined line, owing to the country not yet being known.

It will thus be seen that the map, although showing part of the *continent* of Africa, for *commercial purposes* represents a coast-line of large extent, with no inland limitations.

2. This coast-line is divided into circles or smaller "coasts," such as,—working from north to south,—**Ajan**, **Mukdeesha**, **Melinda**, **Zanzibar**, **Mozambique**, and **Inhambane** coasts. From the Querimba Isles to Delagoa Bay the shores are washed by the Mozambique Channel, separating the mainland from Madagascar.

3. This area is only a coast-strip, assuming importance within the last few years. Although trade is increasing, Ajan and Mukdeesha are little visited by European traders, and these chiefly frequent the central port of Magadoxa and the frontier sea-town of Juba, between Mukdeesha and Melinda.

"Regular liners" run up and down these coasts, calling at these or any local ports as inducements arise.

4. The true commercial coast is merged into what is technically divided into the Zanzibar coast and the Mozambique coast. The former, runs from just north of the Querimba Isles, to as far north as there are ports; and the second runs south, from these islands to Delagoa Bay. The harbours are generally open; that is, vessels must lie off the coasts, the ports being mostly sand or coral, and but few, allow vessels to come close inshore.

5. Ajan, in the north, is generally flat and sandy, but that herbage is plentiful may be inferred from the droves of horses and ponies for which this district is noted.

6. The Zanzibar coast, through its whole length, is very low; the island of Zanzibar itself is of coral formation. The soil is most fertile, it being supposed that there is a substratum of guano lying between the coral rock and the subsequent accumulations of decomposed vegetable matter.

7. The Mozambique islands are low coral; the mainland is flat; the Zambesi river brings down immense accumulations of sand, &c., which are deposited at the mouth, and these alluvial deposits have formed a promontory guarding the entrance to the river.

8. The extreme fertility of the soil causes vegetation to flourish in tropical luxuriance. An immense amount of decomposed organic matter, acted upon by the vertical rays of the sun, renders the shores unhealthful for Europeans.

There are no available economic minerals. There appears, however, a good prospect of minerals from Central Africa gravitating towards this centre.

9. Rivers are numerous, but not yet of commercial consequence. The Zambesi, the most important, may possibly, by the opening out of the Dark Continent, rise to the trading position of a river of the first class.

10. These coasts are now assured new markets, which, by the establishment of European "branch houses" at the ports,

and the caravan communications with the interior, combined with inexhaustible agricultural resources, have made it advantageous to run **regular lines of steamers** from European ports to and from all ports on this coast. *The present great drawback to the trade is the want of good harbours.*

11. As far as commerce is concerned, the natives are passive, even hostile to inland exploration; but Europeans are penetrating the interior and along the coast, notwithstanding resistance, incited to adventure and enterprise by the prospects of a profitable trade.

12. Commercial transactions, as yet, are entirely confined to the almost spontaneous productions of nature along the coast-ship, and up the rivers as far as civilisation reaches; the products of Central Africa can be brought shorewards by the caravans.

13. Gravitation throughout is to the sea-coast, and the distributing centres are all on the shore; Ajan has the alternative gravitating facility to Abyssinia; Mukdeesha has centres in Magadoxa and Juba; Melinda, in port Melinda, Mombasa, and Pemba; Zanzibar, in Zanzibar and Quiloa; Querimba, in Querimba; and Mozambique, in Mozambique, Quilimane, Sofala, and Inhambane. Each bay, too, has its small port. The reason of this multiplicity of ports is that, owing to the great difficulty of securing inland transit, it is almost impossible to concentrate the produce to one common centre or emporium; consequently, goods accumulate at the intermediate places, and are called for by the vessels. There are no inland centres, except Sena and Tete, on the Zambesi. Commercial activity, then, is confined to the coast, and gravitation throughout is to the ports; transit being solely by caravan and coastwise.

14. These districts are exporters of earth-gifts, raw materials only, and receive in return, cottons and other finished European goods and manufactures.

15. *In these new open markets, England necessarily meets with competitors*, and it is to these comparatively near-lying shores that India is disposing of her finished cottons, made by the

Bombay looms, against English Manchester, German Chemnitz, and French Rouen. The Zanzibar and Mozambique coast trade is capable of indefinite expansion.

16. Among mineral resources *from the interior* are antimony, copper, and gold. Up the Zambesi, gum-copal, coal, and iron are met with.

17. Wherever the soil is cultivated, tropical products abound; among them, amendoim, banana, coffee, cloves, coco-nut, caoutchouc, cotton, cinnamon, coir, copra, calumbaroot, cassava, figs, fruits, gums, ground-nuts, jowary, kernels, maize, millet, myrrh, manna, manioc, mango, nutmegs, oranges, orchilla, plantain, pastures, pepper, rice, spices, seeds, sugar, sesamum, wax, &c.

18. Local trade movements are entirely *by sea, coastwise, by river and caravan* with the interior, and by *ocean-steamers* from all coast ports, but especially Zanzibar and Mozambique to Madagascar, India, the United Kingdom, continent of Europe, and America.

19. There are no published trade returns; indications of the growth of this trade can only, at present, be seen by the increase of mercantile movements, both by "regular liners" and by "seeking" vessels.

Examination Questions on North and East Africa.

1. Name the Barbary States in order eastwards, and point out wherein they differ in industrial and commercial advantages from the European States on the opposite shores of the Mediterranean Sea.
2. Describe the relative commercial advancement of these States, the hindrances to material progress, the area of intercourse, the character of the merchandise, and the modes of conveyance.
3. Narrate the history of the Suez Canal, with the commercial changes which it has produced.
4. What is the present condition of the trade of Egypt? What is the nature of this trade? What are the commercial relations between Egypt and England?
5. Distinguish between the produce of Egypt, Nubia, and Abyssinia.
6. What is meant by the East African trade, and what commercial constituents does it comprise?

SOUTH AFRICA.

Geographical position, 1—**Commercial position**, 2, 3, 10—**Geographical features**, 4, 5—**Natural divisions of the colonial territory**, 5—**climate and soil of these divisions**, 6—**physical features of the east coast**, 7—**Natural features in relation to resources**, 8—**harbours**, 8—*Ebb and flow, with natural centres*, and **circulation of goods**, 9, 12—**The interior of Africa and "the Cape,"** 11—**Centres of distribution**, 16—**Commercial activity**, 10, 11, 13, 14—*Characteristics of this trade*, 12, 15, 17—**Natural trade division**, 18—**Mineral resources**, 19—**Localisation of the principal metals and minerals**, 20—**Agricultural resources**, 21—**Localisation of the chief agricultural produce**, 22—**Means of intercommunication**, 23—**Trade statistics of Cape Colony**, 24; *of Natal*, 26—**Review of the movements of trade and population in Cape Colony from 1870 to 1885**, 25; *and in Natal from 1874 to 1884*, 27—**Examination questions**, p. 240.

1. This district occupies the whole of the peninsula-shaped portion at the south of the great African continent, bounded on the north by the vast untapped areas of Central Africa, on the west by the Atlantic Ocean, on the south by the meeting waters of the South Atlantic and Indian Oceans, and on the east by the Indian Ocean.

2. South Africa is, west and south, in direct and open intercourse with the coast settlements, the Atlantic islands, Europe, and the eastern shores of America; also in straight course for Australasia either *via* the Cape Horn or the eastward passage; and on the east with Madagascar, the east coast ports, India and the East generally, or Europe by the Suez Canal.

3. Before the opening of the Suez Canal the Cape of Good Hope was the "half-way house" for all mercantile movements between Europe, the East, and Australasia; now it is an important commercial colony, besides a port of call.

4. The general aspect of this country is that of mountain and plain. Long mountain-ranges run from east to west parallel to the southern sea, with intervening valleys and plains, which rise in terraces, in successive stages to the tableland of the interior.

5. Within the colonial territory these mountains consist of *three distinct ranges* :—(a.) The **Lange-Berge** and **Lange-Kloof**, which range runs parallel with the coast at a distance of some forty miles. (b.) **Beyond this range extends a plain**, of higher elevation than the maritime lands, and spreading about forty miles farther to the next range, the **Zwarte-Berge**, running from the east coast to the west; and (c.), **beyond this range**, at a higher elevation still, stretches the Great Karroo, a plain some hundred miles broad, and stopped by the **Nieuw-veld Mountains**, the highest range in South Africa. Farther north the country slopes to the great Orange River, and then loses itself in the inland stretches of, at present, unknown territory.

6. The maritime lands are covered with a deep, fertile soil, watered by many streams and rivulets, and have a mild, equable climate. The succeeding plain, beyond the Lange-Kloof, which connects with the low land by one *natural route*, and one only, the Groote and Gauritz river, contains a considerable portion of well-watered, fertile lands, but these are interspersed with tracts of arid desert. The third plain, which connects with the second by branches of the Gamtoos, Sunday, and Fish Rivers, and with the sea, by the Doorn on the west, exhibits everywhere a hard, clayey surface, thinly covered with sand; the eastern part being well watered, and yielding most excellent pasturage. Finally, the country opens into extensive plains on all sides, while westwards, down the Gariep or Orange River, the land becomes bare and sterile.

7. On the east coast, from the Keiskamma to Delagoa Bay, the inland country is one of the most varied and interesting of regions, presenting every diversity of rich field and fertile valley.

The Drakenbergen or Kathlamba Mountains, which are a continuation of the third chain,—the Nieuwveld Berge,—run through to the Transvaal, and terminate in land sloping to the Limpopo river. This range is of considerable elevation; the country is well wooded and fertile, while the climate is very healthy.

8. The high lands yield stores of mineral wealth; the harbours are many and often excellent, although in parts,—East London, &c.,—vessels have to lie off the shore, exposed to wind and surf.

9. We thus see that natural gravitation is to the sea, from one higher terrace to a lower, and thence to the ocean, either by road or stream; while for the country to the north of the Nieuwveld, and west of the Drakenberge, the whole gravitation lies to the great Orange River, and on the north of the Transvaal to the Limpopo on the east coast.

10. The commercial position of South Africa is in every way excellent, favoured with a lengthened sea-board, and including, as a rule, safe and commodious ports. It is peopled by colonists who bring their home-country knowledge to bear on their pursuits, and who are extending communication by railways and improved roads; hence all produce can come forward with more ease; and this induces enlarged commercial movements.

11. Further, it is an open question whether the riches of the great interior will not find an outlet by the South African ports, in preference to other coasts. This project would be strengthened by the construction of a railway joining Cape Colony and Natal to the Zambesi river. The regular sea communication with Europe, and an open, direct route to America and the East, give this district an unexcelled position.

12. The gravitation and circulation of goods, as throughout Africa, is to and from the sea-coast. There is but little trade between town and town, all being supplied from the great seaport centres. The duty of our merchants and traders in this district is to watch the advance and extension of the

railways and the increase of the towns, and be ready to supply the well-known wants of the people.

13. In an agricultural colony we should not expect to find any great concentration of people into towns. Further, the mineral riches, especially the copper and coal of the eastern parts and the diamond-fields of Kimberley, attract more workers, but without concentration.

14. Again, the colonists, turning attention to their land, to the improvement of sheep-runs, ostrich-farms, or woods, do not attempt *industrial life* in many forms. They look to the mother-country to supply their requirements, which, they know, are well understood, and offer in return the earth-gifts of their adopted territory. The well-known *Cape wools*, the *ostrich-feathers*, *ivory*, *cereals*, *woods*, *drugs*, &c., and the regular lines of vessels to "the Cape" prove the result of the labour of the colonists.

15. South Africa, then, is a supplier and customer only, not a competitor, of England. She sends over her many resources from the animal, vegetable, and mineral kingdoms, and receives in exchange every manufactured article required.

16. The inland towns are few, and none of them rank as centres. They may act as subsidiary emporiums for the ports. Cape Town is the great western centre; Mossel Bay and Algoa Bay in the south; Port Alfred, Durban, Port Natal, and Delagoa on the east. There are many minor ports, but these are the most important.

17. The trade is an increasing one, the circulation of goods yearly becoming of greater volume; and the commerce of South Africa is a very important item in English trade returns.

18. Cape Colony, Natal, Bechuanaland, Transvaal, Zululand, and Orange Free State combine to make up the "Cape trade."

These districts lie in the *southern pasture zone*, and have a total area of about 1,000,000 square miles.

19. The mineral products of this district consist of coal, copper, cobalt, diamonds, gold, garnets, graphite, guano, iron, limestone, lead, manganese, precious stones, silver, and tin.

20. Coal, both anthracite and bituminous, occurs in Natal and the north, with iron lying close by, also in the Transvaal and Orange Free State; but as yet these resources are undeveloped.

Copper chiefly from near Port Nolloth, although it does occur in other parts.

Diamonds from the Kimberley district principally.

Guano from the island of Ichaboe, off the west coast.

Gold from many fields. Rich and extensive deposits, it is stated, have, as recently as November 1887, been discovered in Leuderitzland and Angra Pequena.

21. Produce from the vegetable and animal kingdoms consists of aloes, arrowroot, argol, beans, barley, cotton, coffee, drugs, durra, fruits, gum, ginger, indigo, ivory, maize, millet, oats, ostrich-feathers, pepper, pine-apples, rice, rye, sugar, spices, silk, tea, tobacco, the vine, wax, and wheat.

22. Drugs.—Many are indigenous; yet hardly enter into commerce.

Millet is grown chiefly in Zululand.

Maize thrives well in Natal, and is likely to yield a larger export.

Pastures are universal, and nourish the flocks, whose products form a staple of this trade; namely, hides, skins, &c., and wool, equal to, if not the same, as Angora.

Tea is likely to be a thriving industry, as the plants grow well. Sericulture, too, promises to be important.

Vine in the south, yielding the wines of Constantia.

Wheat is a staple crop in the Transvaal.

23. Local Trade Movements.—There are many ports on this coast which act as entrepôts and emporiums for the up-country produce. Bullock-carts are the only means of conveyance from the interior until they reach the lines of rail, which now run a few hundred miles into the provinces. These lines at present only follow the settlers, there being no attempt at a through-line from coast to coast.

A concession has been obtained by the Dutch to join

Pretoria and Delagoa Bay; in point of fact, the Dutch will own all the Transvaal railways, which must give a great impetus to trade between Holland and the Cape.

From the ports on the coast there is ocean communication with the world at large, but especially, by regular lines, with Great Britain.

24. Looking at statistics, we see that in 1870 the population of Cape Colony was about three-quarters of a million, being equal to only three to the square mile.

From 1869 to 1873 the total imports,—including Kaffraria,—averaged $3\frac{1}{4}$ millions a year, and the exports $3\frac{3}{8}$ millions; of this trade England apparently received 3 millions of the exports and supplied $2\frac{7}{10}$ of the imports. The staple exports were wool ($2\frac{1}{2}$ millions), copper (a quarter of a million), feathers a little over, and skins a little under, £200,000. The imports were apparel and haberdashery (nearly three-quarters of a million), cotton goods (half a million), and iron (£360,000).

In 1885 the population had increased to about $1\frac{1}{4}$ millions. From 1881 to 1885 the total imports averaged 7 millions annually, Great Britain supplying $4\frac{1}{4}$; the exports, excluding specie, averaged 4 millions,— $5\frac{1}{2}$ total,—nearly all going to the United Kingdom. The staples were wool ($1\frac{7}{10}$ millions,—the average from 1881 to 1884 being 3 millions), copper (a quarter of a million), feathers (a million), and skins (£800,000), outwards; with apparel and haberdashery (£600,000), cotton goods (£360,000), iron and leather (each a quarter of a million), inwards. There is a discrepancy between the Cape and English returns, the first giving for 1885, exports $5\frac{1}{2}$ millions, and imports $3\frac{3}{4}$ millions; the second giving them respectively $3\frac{1}{4}$ millions and $2\frac{1}{4}$ millions.

25. Taking these figures, we see that, from 1870 to 1885, the population *increased* about 50 per cent., due in a great measure to immigration. The total imports *rose* nearly 130 per cent., while the exports *remained comparatively stationary*, but rising over 50 per cent. if specie be included.

In 1870-74 period, Great Britain held 90 per cent., or thereabouts, of the total trade. In the following period, 1881-85, our receipts from the Cape had *risen* 66 per cent., and our sales to the Cape nearly 75 per cent. We, apparently, still held about the same proportion of the total trade; but, owing to the differences in value of the returns, it is not easy to compare accurately.

Staple exports, as far as wool was concerned, *declined* nearly 50 per cent., but feathers and skins *rose* fourfold, while copper *remained quiet*. There is considerable *transit-trade* with the surrounding republics. Considering the immense tracts of country and the pushing-on of the railways, this trade ought to increase vastly. There are many commodities of great commercial value which yet lie practically untouched, and there seems no real obstacle to this colony of ours assisting her own and the national wealth to a degree equal to the present commercial resources and turnovers of the Australasian colonies or Canada.

Holland has still a keen eye on her old position, and is quietly stepping in, using a wise precaution in monopolising the railways as the best internal means of transit. There is no reason, however, why the total trade should not largely increase and Great Britain still retain nine-tenths.

There are some thousand miles of railroad constructed, or now under consideration, which will give an immense impetus to the "trade," and lead the Cape to copy Canada in its rapid expansion.

Whether the produce resulting from the explorations and tapping of the "intermediate zone" will descend to the sea through this area, or by the east coast, or by the west coast, yet remains to be seen; but the advancement of the railways to the frontiers indicates that Southern Africa and our own colonies aim to be the first to reap the benefit of this opening trade.

26. Natal is included in South African trade, and has separate returns from those of the Cape Colony.

In 1874 the population numbered a little over three-tenths of a million, or seventeen to the square mile.

From 1870 to 1873, the total imports averaged £650,000 a year, and the exports £570,000; from 1870 to 1874, the exports to Great Britain averaged £520,000 annually, and the imports £570,000. But here again there is a discrepancy between the returns as given by Natal and England. The staple exports in 1874 were wool (£400,000,—the average from 1869 to 1873, being £250,000), hides (£170,000), sugar (£16,000), and cotton (£2000,—the average for the last, from 1869 to 1873, was over £17,000). Cotton has been grown since 1866, but, as will be gathered from these figures, it is a decaying culture. Some of the exports named are really the produce of surrounding republics.

In 1884, the population reached nearly half a million. From 1881 to 1885, the total imports averaged 1½ millions a year, of which England supplied 1½; the exports were 1 million, Great Britain drawing half this sum. The staple exports were wool (half a million), hides (nearly £80,000), and sugar (£40,000); the imports were apparel and haberdashery (£200,000), leather and iron (both approximated £100,000), and machinery (just under £50,000).

In 1884, 88,000 acres were stated to be under European, and 295,000 under native, cultivation.

27. From this review, we trace that, from 1874 to 1884, the population *increased* about one-third; that from 1870 to 1874, the total imports *rose* threefold, and exports 66 per cent. *In the period 1870-74, Great Britain held nearly all the trade; but in 1881-85, owing partly to Dutch competition, we only held about 60 per cent. of the exports and 58 per cent. of the imports.* Owing, however, to the differences in the value of the returns, it is difficult to compare accurately; at any rate, it would seem that, while our imports to Natal nearly doubled themselves between the two periods, the exports stood still.

With regard to staples, wool export *rose* fully 40 per cent.,

hides *fell* quite 50 per cent., cotton *entirely disappeared*, but sugar *rose* 150 per cent.

There is, undoubtedly, a large trade opening here; the chief drawback to development being the bad approach to the harbours; but, with increased and increasing railway facilities to and from Durban, this cannot long remain an obstacle.

WEST AFRICA.

Geographical position, 1—Political divisions, 1, 13—*Characteristics of this trade*, 2—**Commercial activity**, 9-12, 18—Centres of distribution, 11, 12—Climate, 4—Senegambia and Liberia, 4; Guinea Coast, 5; Angola, 6; Benguela, 7; description of features and climate in relation to resources.—Commercial hindrances, 8—Commercial position, 9—*Ebb and flow of merchandise to natural centres*, 10—**Natural trade division**, 13—**Mineral resources**, 3, 14—Localisation of the principal metals and minerals, 15—**Agricultural resources**, 4, 16—Localisation of the chief agricultural produce, 16a—Means of inter-communication, 2, 10, 11, 17—**Trade statistics of Liberia**, 18—Review of the movements of trade and population from 1873 to 1883, 19—**Examination questions**, p. 240.

1. **West Africa** includes the well-known **Gold Coast, Slave Coast, Calabar Coast, Ivory Coast, Biafra, Benguela, Congo, &c.**, and is bounded inland by an undefined line through the Soudan and Central Africa.

2. Like the eastern side, this is **entirely a coast trade**. The centres are chiefly seaport towns, but, owing to Africa being better known on this side, **inland towns** have sprung up, and, through caravan routes, connect North and West Africa.

3. **Mineral resources**, excepting gold-dust, are rare; but, in vegetation, tropical luxuriance obtains, and the riches of this kingdom are apparently unlimited.

4. Owing to the marshy shores and the great heat, *the coast is unhealthy for Europeans*. Thus, in **Senegambia and Liberia** the coast lies very low, and immense forests cover the country; leaves and herbage, continually falling and rotting, increase the depth of damp, sour soil, and disseminate malaria

and fevers. *The streams, through these flats, run a sluggish course, and deposit much mud, a fruitful soil for mangroves, but also indicative of the prevailing mangrove swamps.*

5. The **Guinea Coast** is similar in character, and extends to Cape Lopez. Farther south, **Loango**, running from Cape Lopez to the Congo, has an abrupt coast, with hills covered with a rich soil and luxuriant vegetation. **Congo**, which stretches to Angola, is near the sea, a low, flat country, traversed by *languid streams* and abounding in sandy deserts. The interior consists of a number of rising terraces, forming a fine, rich country, well-populated.

6. **Angola** is very mountainous and destitute of plains, except near the sea and on the slopes. The inland country is rich in soil and very productive.

7. **Benguela** also is high, well watered, and has a fertile soil. In common with the rest of the coast, the shore-lands are unhealthy, but the climate of the interior is good.

8. **The great detriment to commerce, on these coasts, is the want of harbours**, vessels having, in nearly all instances, to lie off the shore, on which a heavy surf beats, thus retarding loading and discharging.

9. **The commercial position** of these countries is naturally excellent, with such a sea-board, besides a vast territory eastwards; given good harbours and industrial activity, the growth of trade must be enormous.

10. **The gravitation of goods is all seawards.** The ports, whether large or small, act as centres for an adjoining inland circle. **Inland transit** is by road, assisted by the streams and rivers where available. The road work is done by caravans, which call at the seaports with up-country produce, returning with imported goods.

11. These caravan routes have caused the growth of **inland emporiums or markets**; as **Wadan, Walata, Basikunnu, Timbuctoo, Kong, Sokoto, Agades, Masena**, and many others; these are all "*crossing centres*," converging points of overland traffic.

12. Each coast has its great central port, with many other smaller ones, such as St. Louis, Bathurst for the Gambia, Sierra Leone, Axim, Cape Coast Castle, Lagos, St. Paul de Loando, &c.

13. West Africa covers a large area, embracing a tract of country, varying in width from the Straits of Gibraltar to the borders of Cape Colony. The northern parts are more populous, but, for commercial purposes, the country farther south only extends a few miles inland from the sea-coast.

14. **Mineral Resources.**—Among minerals occur antimony, amber, copper, coal, gum-copal, gold, rock-crystal, iron, lead, petroleum, sulphur, salt, silver and tin in various parts.

The minerals of Morocco have been referred to in the North African area.

15. Copper is abundant in Morocco, and rich ore is brought from Ofran and Teselegt.

Gold is the specialty of this area from north to south, principally on the Gold Coast and Senegambia.

Iron in Morocco; probably also in Liberia and Senegambia.

Lead in Morocco and Lagos.

Sulphur from the mountains; gold-dust, natron, and salt from the interior.

16. The resources of the vegetable kingdom are abundant, being the outcome of both the tropical and sub-tropical zones.

We find among the products almonds, anise, beniseed, bananas, beeswax, barley, beans, baobab, copal, camwood, cola-nuts, caoutchouc, coco-nuts, cassava, cotton, copra, coffee, canary-seed, cardamoms, coriander-seed, cumin, ceiba palm, dyewoods, date, ebony, fig, fruits, Guinea grain, cloth-grass, gums, ginger, ground-nuts, hemp, indiarubber, indigo, kernels, lentils, lemons, maize, millet, manna, nuts, orchilla, olive, orange, pine-apple, pepper, palm-oil, pimento, peas, pomegranate, rice, shea or butter-tree, sugar, saffron, spices, silk, sesame, seeds, tobacco, teak, and yams.

a. Barley, maize, millet, and beans from Morocco.

Coffee from Liberia; a new "giant coffee" is the produce of this State.

Palm-oil, ground-nuts and kernels from the more southern parts.

17. Local Trade Movements.—By sea and coastwise, and by caravan between the interior and sea-coast. Steamships take out goods and manufactured articles, which are deposited in the seaports, and then distributed through the country; the ports thus acting as emporiums.

18. Statistical returns are too scanty to compare country by country; they are simply given under one head—**Liberia**.

In 1870 the population was estimated at three-quarters of a million, scattered over a vast area. From 1870 to 1874 the exports to Great Britain averaged $1\frac{3}{4}$ millions a year, and the imports seven-eighths of a million; the staple, in 1874, being palm-oil, outwards (valued at $1\frac{1}{2}$ millions); cotton goods (£300,000), arms and ammunition (valued at nearly £90,000), inwards.

In 1883 the population just exceeded a million over an area estimated at 14,300 square miles. From 1881 to 1885 the exports to the United Kingdom averaged $1\frac{1}{2}$ millions annually, and the imports 1 million. The staple exports in 1885 were palm-oil (£650,000), nuts (£200,000), caoutchouc (£150,000), and ivory (£120,000); while the staple imports were cotton goods (valued at £300,000).

19. From the above we see that from 1873 to 1883 the population *increased* about 50 per cent.; while the trade with Great Britain remained, in the aggregate, really *stationary*, the exports *receding* 16 per cent., and the imports *improving* nearly 12 per cent. The imports of cotton goods *declined* very slightly, but the export of palm-oil very seriously *fell off*,—over 50 per cent.,—but this was counterbalanced by nuts, ivory, and caoutchouc rising to the rank of staples.

Trade seems stationary, but there is a vast scope for enterprise. The climate is considered unhealthy, but the Portuguese are pressing an active business in this direction.

Examination Questions on South and West Africa.

1. What indigenous resources does South Africa possess, and what industries have they fostered?
2. Describe the commercial relations between these colonies of South Africa and the mother-country, and how far they have been influenced by the opening of the Suez Canal.
3. State the nature, localities, and relative importance of the mineral-produce of this region, with an account of the most recent discoveries.
4. Write a general description of the trade of Natal.
5. Characterise the West Coast of Africa, and explain the designations of Gold Coast, Ivory Coast, Guinea Coast, and Slave Coast. What are the commercial inducements to Europeans to become residents of Sierra Leone?
6. Name the West Coast ports, and describe the harbourage and inland commercial movements.

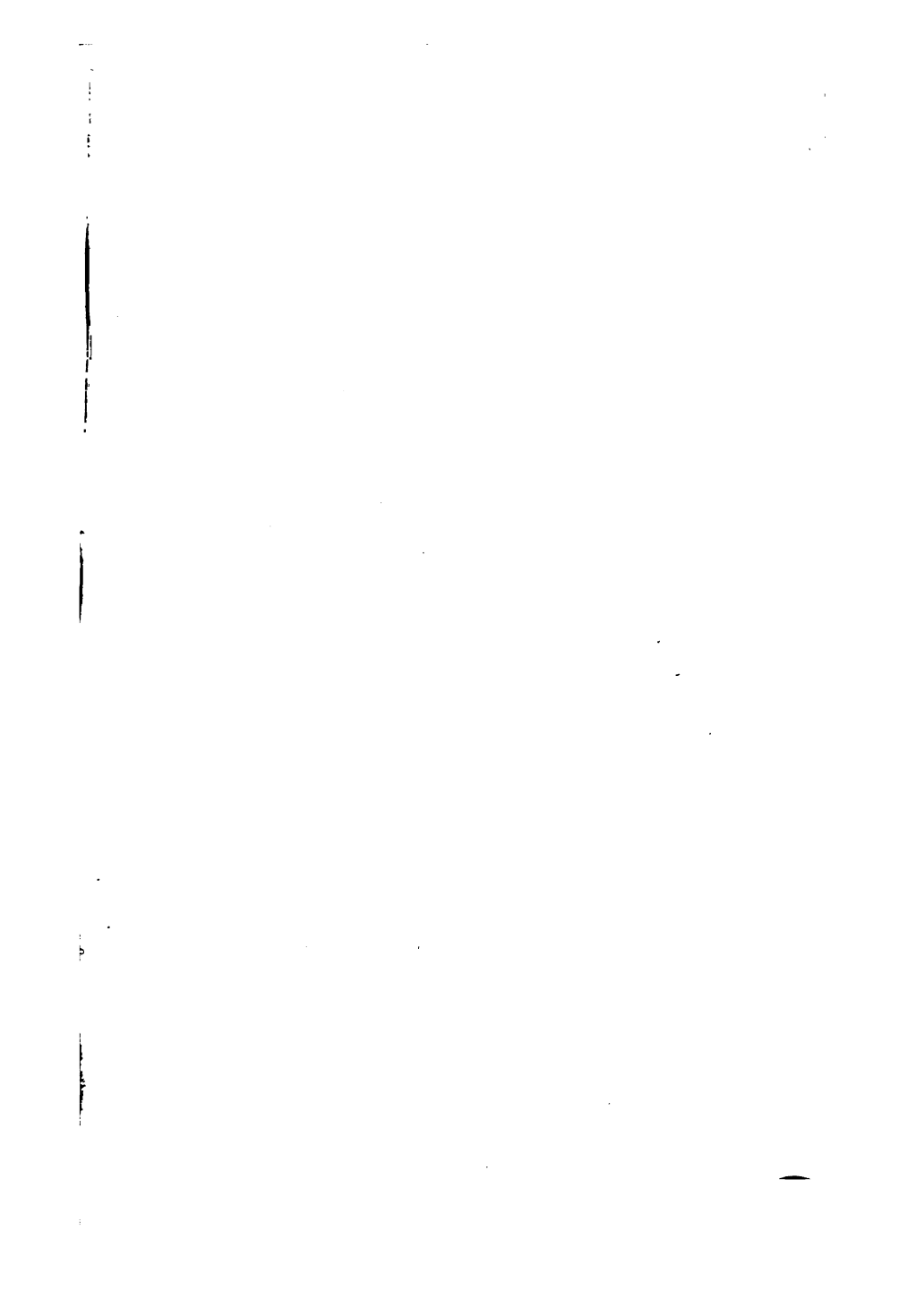


CHART (A)

COUNTRIES.		NATURAL ANIMAL PRODUCTS.
A	South. { (a) Cape, Natal, Orange. (b) Transvaal, Griqualand.	Copper, gold, wool (a); gold, feathers, tus.
	Centre. { (a) Nigritia. (b) Sahara.	Sulphur, ostrich-feather dust, natron (b).
	North. { (a) Morocco, Algeria. (b) Tunis, Tripoli.	Iron, silver, ivory, coral, lead, copper, rich-feather antimony — silk (b) (infusorial) — scent.
	Nile Basin. { (a) Egypt, Soudan. (b) Abyssinia.	Syenite, nutmeg, ammoniac, crocodile, ant salt, alabaster, ivory, salt, manna, pearls (a) — block coral, wax. rald (b).
	East. { (a) Somali, Gallas, Socotra. (b) Zanzibar, Mozambique.	hens, ivory, Coal, gum, time (a); wax, y (b).
	West. { (a) Benguela, Angola, Lower Guinea. (b) Upper Guinea, Liberia, Senegambia.	Iron, copper, k (a).
	Western Isles. { (a) Madeira. (b) Canaries.	ll, cochineal, lk.
	Eastern Isles. { (a) Madagascar, Comoro. (b) Mauritius, Mascarenes.	Iron, copper, hens, turtle- (Madagascar) — bergeryris (a).
O	Melanesia. { Islands north of Australia.	ers (birds of to.), tortoise.
	Micronesia. { Islands north of Papua.	re-shell.
	Polynesia. { Islands of Central Pacific.	Sal ammon (mother-of-Sandrl).
COUNTRIES.		NATURAL

AMERICA.

CANADA.

Geographical position, 1—Contrast between the climate of Canada and countries lying in the same parallel of latitude, 2—Natural features in relation to resources and industrial life, 3, 5–7—**Geographical features**, 3–6—Commercial position, 8–10—Contrast with the United States, 8, 9—The rivers of Canada, 2, 4, 8, 14—Their influence upon commerce, 8, 14—Harbours, 2, 10—*Characteristics of Canadian trade*, 11—*Ebb and flow, with natural centres*, and circulation of merchandise, 12–15—The land-frontier, 16; in relation to commercial movements.—Centres of distribution on the east coast, 17; on the west coast, 18; and inland, 19—**Commercial activity**, 19, 20—**Natural trade-area**, 21—Political divisions, 22—**Mineral resources**, 23—Localisation of the principal metals and minerals, 24—**Agricultural resources**, 25—Localisation of some of the important agricultural produce, 26—Fisheries, 27—Means of intercommunication, 13, 28—**Trade statistics**, 29—Review of the movements of trade and population from 1871 to 1881, 30—**Examination questions**, p. 261.

1. **Canada, or British North America**, is a dominion embracing all that part of the New World which lies north of the United States,—exclusive of Alaska,—shelving as a depressed plain of forests, rivers and lakes, to the polar frozen ocean. The boundaries are—on the west, the Pacific; on the east, the Atlantic; and on the south, a land and water frontier contiguous with the American Union.

2. Lying between the same parallels of latitude as the British Islands, the two countries, in their physical conditions and aspects, are in direct contrast on their opposite Atlantic shores. The icy Arctic counter-current flows southwards, and through the winter, locks the seas, harbours, and rivers in ice;

while, across the ocean, the United Kingdom is girt around by seas, ever open, through the influence of the warm Gulf Stream.

3. The interior is intersected by mountain-ranges and fertile valleys. Cultivation is possible, and fine crops are harvested, everywhere, except where restricted by climate.

4. Watered by the St. Lawrence and a chain of the grandest fresh-water lakes, easy access is given into the country. The soil around these lakes and farther west is not exceeded in fertility on the American continent.

5. From the lakes to the Rocky Mountains, running parallel with the Pacific coast, lie vast low plains, comprising the finest corn-lands and pastures, with pathless and silent forests. Far north, vegetation is checked by the rigour of the polar zone.

6. Between the "Rockies" and the Cascade Mountains, a continuation of the Californian range, rich valleys again appear, while both slopes of the hills are thickly clothed with timber, and the ocean borders wave with grain.

7. **The Dominion of Canada may be described as one vast pasture and grain-bearing plain, with boundless forest land.**

8. **The commercial position** of Canada is very similar to that of the United States, but has the drawback of a total cessation of sea-traffic, from Nova Scotia northwards during the winter, and an Arctic sea-board, north; instead of a warm southern shore, as on the Gulf of Mexico. Further, there is the drawback of **rivers discharging their waters northwards** instead of **southwards**, and consequently freezing,—features that would fatally injure the trade of Canada but for the approaches west, east, and southwards. Otherwise there would be a reproduction of inhospitable Siberia, with frozen lands, stagnant trade, and no activity, instead of the fruitful lands, active commerce, and populous towns that now meet the eye.

9. Separated from England by less than 2700 miles, and therefore, in practical touch with all Europe, having a through land railway communication from ocean to ocean, in communication, again, on the west, with China, Japan, Australia, and the

East generally, and internationally, with the United States along its entire frontier, **Canada has, in its commercial, geographical, and economic position, every element of success.**

10. The harbours are deep, safe, and commodious for vessels of any tonnage. *One nationality extends from ocean to ocean ; commerce is consequently carried on without the drawbacks of customs' dues and vexatious delays where frontiers have to be crossed.*

11. Canada, like other newly-formed countries, exports raw materials and first products, such as dairy foods, together with a few manufactured specialties in return for finished goods—ironwork and clothing.

12. The gravitation of goods is chiefly to the east coast ports, *because this coast is the one directly facing the great business centres of the world*, namely, European countries; while the west coast turns towards the apathetic countries of the East, which are our own customers, and can draw from Canada but little of what they want.

13. Transit is effected by a magnificent system and series of lakes, the great river St. Lawrence, and the many canals cut to avoid impediments in the navigation.

14. From the east coast to the Rocky Mountains, excepting the St. Lawrence, most of the rivers run *northwards*, and consequently are of small use for commercial transit purposes—a difficulty now overcome by the railways which reticulate the east, and are advancing, ever westward, as the settlers begin to send their raw materials down to the sea.

15. The "**Rockies**" oppose a natural barrier to gravitation. Movements on the east trend to the St. Lawrence ; or, using the rivers that flow out through the States, and the international lines of rail, reach the Atlantic ports. All movements on the west gravitate, of necessity, to the Pacific. The Canadian-Pacific line now climbs these heights and connects the two ocean shores.

16. The land-frontier between Canada and the United States is a *national* one, and not a *natural* barrier; consequently, a circulation of goods takes place between the two countries.

This is specially noticeable across the natural lake-frontiers, where one shore belongs to the States and the other to the Dominion of Canada.

17. The **gravitating centres** on the east coast of Canada are **Quebec** and **Montreal** for the St. Lawrence, the lakes, and Canada West; **Halifax** for Nova Scotia and New Brunswick. There is a *divergence of trade* here, so far as distribution is concerned, to which it is hard to find a counterpart; for, as the river St. Lawrence is ice-bound, and closed to navigation for some portion of the year, the **ports of the United States**, another nationality, become largely distributing centres for Canada,—notably **Boston** and **New York**. The reason is clear. Although Halifax is “open” all the year, still it is far removed from Canadian centres; while New York lies close to the business circles around Montreal and Quebec; and when Montreal cannot export from her own quays, by reason of frost, *merchandise will gravitate to the nearest point, independently of political divisions*. A second reason is, that many more steamers and vessels visit and leave New York than the more northerly ports, simply because there is more demand. Therefore there are two circulating forces at work in Canada: in the summer her own centres export and import direct, while in winter the gravitation is diverted, and New York used.

18. On the west coast, a new port in **Vancouver**, or **Port Moody**, is rising into importance as the terminus of the great Canadian trunk-line; but, for the present at all events, this line and port will stand chiefly as “transit,”—for goods consigned from Europe to the East and *vice versâ*, rather than for Canadian merchandise pure and simple.

19. With regard to **inland centres**, *industrial work* draws the people into large towns in the east; but the farther west we go, the more *agricultural* becomes the population, and consequently the more scattered.

The shores of the lakes, with parts of Nova Scotia and New Brunswick, attract a mining people; but Canada, distinctively, is agricultural, while some part of the community is drawn to

the coast fisheries. The eastern centres, besides Montreal and Quebec, are Fredericton and St. John's, on St. John's River; Ottawa, on the higher St. Lawrence; and Toronto, on Lake Ontario. Farther west, Winnipeg is an entrepôt and a distributing centre between the States and Canada. As railways extend, entrepôts and emporiums multiply rapidly at the junctions.

20. **Canadian trade increases fast.** Great commercial activity prevails throughout the territory. Besides utilising her own wondrous resources, Canada has made herself the link and line of transit connecting the extreme confines, east and west, of the Old World.

21. **Canada is included in the general designation of the "States" trade,** and covers, in a trade sense, a tract of country from the Atlantic to the Pacific oceans, north of an average latitude of about 48° N.

22. This area comprises the separate territories of **Labrador, Nova Scotia, Cape Breton, New Brunswick, Quebec, Ontario, Manitoba, North-West Territory, British Columbia,** and the smaller provinces of **Assiniboia, Alberta, Saskatchewan, Athabasca, and Kewatin.**

No division of trade shows a greater disregard to *national* divisions, for to be engaged in the "States" trade means the whole sea-board, purely as a *natural* area.

The total area is 3,470,392 square miles.

23. Canada is not worked for its **mineral resources** to such an extent as the neighbouring United States, except perhaps for coal. Still, abundant resources are yet to be developed, of antimony, asbestos, cobalt, coal, copper, gold, granite extensively, gypsum, iron in abundance, limestone, lithographic stones, lead, marble, manganese, plumbago, petroleum, phosphates, precious stones,—agate, carnelian, jasper, and opal,—silver, slate, salt, and sandstone, with labradorite, baryte, lignite, basalt, and tin. Asbestos, cryolite, and graphite in Alaska.

24. **Coal** is widely distributed, chiefly in Nova Scotia, Cape Breton, New Brunswick, and Vancouver; British Columbia in

the west ; and vast fields of coal, unworked, stretch right across the continent.

Copper is very abundant on the shores of Lake Superior.

Petroleum in Petiolia, Niagara, and many parts of Ontario.

Silver.—There are many mines of silver in Ontario, showing marvellous stores and yield.

The shores of the lakes, especially of Lake Superior, are noted for their great stores of mineral wealth of varied kinds.

25. This area covers the zone of *northern grains* and forests, but loses, in the north, its economic resources under high latitudes and a frozen surface.

Up to 50° N. the climate is favourable for barley, maize, oats, and wheat ; farther north the hardier grains only come to maturity.

Among the very varied resources of the country we find, primarily, timber in all its varieties of commercial use, such as deals, battens, boards, staves, planks, and logs ; also apples,—eighty-four kinds,—barley, beans, buckwheat, carrots and other roots, flax, grass and clover, hay, hemp, hickory, hops, maple for sugar, maize, mangolds, oats, pulse, peas, pasturage and all dairy-produce, potatoes, peaches, potash, rye, spruce fir for beer, tomatoes, tobacco, the vine in parts, vegetables, wood,—resin, pitch, tar, turpentine,—and wheat.

These are found in all parts of the Dominion, and, as cultivation has principally extended from east to west, so the eastern parts at present yield the most produce. British Columbia, Vancouver, and the North-West Provinces are, however, making rapid strides.

26. **Quebec** is the centre of the *wood* or *lumber* trade on the east, and Burraud Inlet (Vancouver) on the west.

Annapolis is the centre of the *apple*-trade.

Barley, **oats**, and **wheat** are the principal cereals grown.

Wheat from Russian seed is now cultivated in the North-West Territory, showing good results,—forty-three bushels to the acre, it is said,—the grain maturing in three months, before

it can be checked by the frosts; wheat is a staple crop in the other districts.

Year by year many centres for distributing agricultural produce spring into existence, aided in great measure by the Canadian-Pacific Railway and its link-lines and branches.

27. The fisheries off Newfoundland and Halifax, and in Canadian inland waters, are renowned.

28. **Local Trade Movements.**—With two fine sea-boards, a grand trunk-line of railway from ocean to ocean, branch or link lines to the United States,—from Winnipeg, &c.,—and a system of rivers, canals, and lakes, connecting the various corners of the vast continent of North America, the Dominion has unrivalled means of transit. The chief movements are from the ports of Quebec and Montreal,—with Halifax; and from the many safe ports on the coast,—from the river St. Lawrence to the United States, as well as on the western shores,—a large, if quiet, trade moves.

The Grand Trunk Railway of Canada has done, and is doing much, to open up the country to the westward; the future of Canada, in a commercial sense, is assured, there being really no limit to its capabilities. Another possible element of prosperity, and *one of considerable importance to the mother-country, is the new route opened up for prompt communication between England and the East,—a way direct to China, Japan, Australia, or India, entirely independent of the Suez Canal or any possible national disturbances, being throughout on British ground.* Whether a practical solution of discharging cargoes on the Atlantic sea-board, transporting them rapidly to the Pacific, and *vice versa*, and then reshipping them for their destination, can be arrived at remains to be seen; it is only a question of time, money, and security in transit.

29. From statistics, we gather that in 1871 the population was just over $3\frac{1}{2}$ millions, or only one to the square mile.

From 1870 to 1874, the total imports averaged $21\frac{1}{2}$ millions a year,—those for home consumption being valued at $20\frac{1}{4}$

millions; and exports $16\frac{2}{3}$ millions, both calculated at four shillings to the dollar. Of these exports Great Britain received $9\frac{1}{2}$ millions, and to the imports she contributed $8\frac{1}{3}$ millions. The staple exports in 1874 were corn and flour ($3\frac{7}{10}$ millions), wood ($5\frac{7}{10}$ millions,—of this, “*hewn*” was valued at $2\frac{1}{3}$ and “*sawn*” at $3\frac{3}{8}$ millions). The imports were iron (2 millions), apparel and haberdashery ($1\frac{1}{2}$ millions), woollen goods ($1\frac{3}{8}$ millions), and cotton goods (£1,000,000).

In 1881 the population was returned as $4\frac{2}{3}$ millions, equaling $1\frac{1}{4}$ to the square mile.

From 1880 to 1884, the total imports averaged $22\frac{2}{3}$ millions annually, $20\frac{3}{10}$ being for home use; exports, $23\frac{1}{10}$ millions; in 1885 the figures were $21\frac{4}{5}$,—home, $20\frac{1}{2}$,—and 18 millions. The imports were pretty equally divided between the United Kingdom and the United States, as were also the exports, but the order was reversed.

From 1880 to 1884, the exports to Great Britain averaged yearly $11\frac{1}{3}$ and imports $8\frac{1}{3}$ millions; the figures for 1885 were 10 and $6\frac{5}{8}$ millions respectively.

The staple exports in 1885 were grain and flour ($1\frac{7}{8}$ millions), wood ($3\frac{3}{8}$ millions,—“*hewn*” $1\frac{1}{8}$ and “*sawn*” $2\frac{1}{2}$ millions), cheese ($1\frac{1}{4}$ millions), animals ($1\frac{1}{2}$ millions), butter (£150,000), and fish (£240,000); the imports were iron ($1\frac{3}{10}$ millions), woollen goods ($1\frac{1}{2}$ millions), cotton goods (1 million), apparel and haberdashery (£700,000).

30. Reviewing the above, we find that from 1871-81 the population increased about 20 per cent. The total imports rose 5 per cent., and exports fully 40 per cent.; in 1870-74 period Great Britain held about 56 per cent. of the exports and about 39 per cent. of the home imports. To preserve the same ratio, the figures for 1880-84 should have been, exports £12,945,000, imports £8,000,000; they really were £11,130,000 exports and £8,115,000. We therefore held not quite 50 per cent. exports and exactly 40 per cent. imports (home).

The United States were, naturally, our greatest competitors. The geographical position of these two countries

tends to a large interchange between the two, even in the face of hostile tariffs; at the same time, England ought to stand first in any trade transactions with her own colonies; especially as the colonies together, sending their raw material to the mother-country, in return for her manufactures, enable the British Empire to be self-sustaining.

Among the staple exports, cereals *fell* 50 per cent.; wood about 40 per cent.; both "hewn and sawn" *suffered*, although, in 1880-84 there was more "sawn" shipped in comparison with "hewn," than in 1870-74. This proves the progress of Canada by the introduction of machinery for sawing, planing, &c., besides the gain accruing to the ship by better stowage.

Our imports remained *about the same* for iron, woollen, and cotton goods; but apparel and haberdashery *fell* nearly 50 per cent.

The United States now supply Canada with many articles of which, a short time ago, England had the monopoly.

No colony has made greater strides towards prosperity than Canada, and when we look at our other colonial possessions, where facilities equal to those of Canada are being pushed on, it is, at least, reasonable to hope that all the requirements of the mother-country and her possessions can be supplied, the one by the other, and yet be able to exchange any required commodity with other nations. Agriculture, in all its branches, has made such strides that Canada now supplies England with dairy and orchard produce, besides timber, grain, fish, &c. Its mineral resources, too, are so varied and abundant that the idea of the exhaustion of any mineral from among our possessions is "the stuff that dreams are made of."

UNITED STATES.

Geographical position, 1—Geographical features, 2, 11-13—Commercial position, 3—Physical features in relation to resources and to industry, 4—climatic zones, 1, 5, 15—Contrast between the New World continent and Asia in regard to physical features, 6, 8, 9 ; effects on commerce thereby, 7, 9—Description of the natural divisions of the United States, 10-14—Harbours, 16 ; people, 17—*Characteristics of this trade*, 18—Commercial activity, 19, 21, 23—*Ebb and flow, with natural centres*, and circulation of merchandise, 20—Centres of distribution on the coasts, 22 ; and inland, 21—Natural trade-area, 24—Mineral resources, 25—Localisation of the principal metals and minerals, 26—agricultural zones, 27—Agricultural resources, 28—Localisation of the chief agricultural produce, 29—Means of intercommunication, and their effect on commercial movements, 30—Trade statistics, 31—Review of the movements of trade and population from 1870 to 1884, 32—Examination questions, p. 261.

1. The United States occupy just over half the continent of North America, extending through 27 degrees of latitude by 57 of longitude, and embracing many climatic zones, all available for active industrial and commercial pursuits.

2. The sea-board is very extensive, bounded by the Atlantic on the east, the Pacific on the west, the Gulf of Mexico on the south. The land frontiers, dividing the territory from Canada and Mexico, are partly natural and partly political ; the natural border-lines being, in the first case, the St. Lawrence and the series of great lakes, and in the second the Rio Grande ; while certain parallels of latitude, by legislative agreement, determine the political boundaries.

3. The ocean between the United States and Europe is now traversed, within a week, from port to port ; while the Pacific

harbours are capitably placed for China, Japan, India, and Australasia. The whole coast is in communication with Central America, South America, and Canada; thus the maritime commerce of the Union may be described as unlimited.

4. The States contain vast resources, both mineral and agricultural. Mineral produce prevails among the high lands and plains contiguous. Vegetation is luxuriant throughout the land.

5. The range of climate is extreme, varying from the limits of hardy northern grains to the southern zone of maize, cotton, and rice, where wheat, if cultivated, only ripens in the winter.

6. A special physical feature of the New World contrasts with the aspect of the Old World; the main mountain axis of the former running outside the ranges north and south, consequently diverting the course of the rivers east or west; but on the "inside" they are confined and turned north and south. These conditions are reversed in the latter hemisphere, where the main axis is at right angles to that of America; that is to say, it is latitudinal, and the rivers flow more or less north and south. *These remarkable physical distinctions account for most of the climatic differences between the two hemispheres.* From the Canadian lines the land slopes gently towards the Arctic Ocean on the one hand, and very gently towards Central North America on the other, forming, in fact, the dividing ridge or watershed. The rivers of Canada, therefore, north of this line, run into the Arctic Ocean, with a comparatively short course, while those running to the south have the whole territory of the United States to cross before they find their exits in the Gulf of Mexico.

7. This difference of aspect has a considerable influence on the economy of the two continents. Compare America and Asia, as they have the finest waterways. In the former the *short-course* rivers flow north, and their want of commercial importance is little missed, particularly as the land is approachable from other quarters. The *long-course* rivers flow south, increasing in volume as they roll along, before they discharge

their waters into the heated Gulf of Mexico. In Asia, on the other hand, the *long-course* rivers of Siberia and the Central tablelands run north, and discharge their waters into a frozen sea, their own banks being congealed to a considerable depth. What a difference this alone must make to a country's energies and enterprise!

8. There is **one more important point** to notice by reason of the direction of the mountain-ranges. In Asia, where the *chains are lateral*,—that is, east to west,—they prevent, on the one hand, the cold blasts reaching the lands lying south of the mountains, and, on the other, they obstruct the passage of the hot winds from the equatorial regions. Consequently they act detrimentally to vegetation on either side; for, while the northerly plains are frozen for a considerable period of the year, and the snow-line on the high lands is much depressed, the southern plains are scorched and dried up.

9. In America this is very different. *The longitudinal ranges* act as a large funnel, through which the cold Arctic blasts rush to meet the equatorial air-current flowing up; consequently, the cold climatic zone is depressed, and comes farther down Central North America than on the other continents, while the east and west winds are equally intercepted. We see the result of nature's ordering, in the commercial importance of the American rivers, which are navigable for so many miles, and the almost inaccessible rivers of Northern Asia.

10. There are **three great systems of mountains** which divide the country into distinctly marked sections,—(a) the Atlantic tableland and eastern slope; (b) the Mississippi Valley; and (c) the Pacific slope and section.

11. The Alleghany range separates the first two, and is more remarkable for its length than its elevation. Between the sources of the Alabama and Mississippi and the great lakes and the St. Lawrence lies a vast tableland, which occupies, therefore, the western portion of the Atlantic States and the eastern part of the adjoining States of the Mississippi Valley. This tableland is well populated.

12. **The Rocky Mountains** form the western frontier of the Mississippi Valley, and the **Californian range** divides the land lying between the "Rockies" and the Pacific.

13. **Along the whole Atlantic coast** is an extensive and low-lying tract, but little elevated above the sea-level. This is very fertile, yet swampy. The western limit of this plain is distinctly marked by a rocky ledge, over which the rivers fall. From here the western tableland stretches to the mountains.

14. **The Mississippi Valley** is, in general, most fertile, although it contains diversity of soil, from the richest alluvial to the most sterile, and from the most tangled cane-brake to the poorest pine-hills. The eastern parts of the valley are covered with dense woods. For the rest, there are vast expanses of smiling corn-fields, acres of tobacco and cotton, with rice in the swamps.

15. **The climate** embraces every variety of temperature, rising through all degrees to tropical heat.

16. **The harbours**, on each coast, are numerous, and generally safe and commodious; some of them, notably **New York** and **San Francisco**, are unrivalled in the world.

17. The Americans are active, industrial, commercial, highly intelligent, and enterprising, to which qualities is solely due the rapid development of their country, and the promise of unmeasured material progress.

18. **The United States** are exporters of raw materials and many manufactured and finished goods, taking in exchange European manufactures, fruits, &c.

19. No country is better served by railways and waterways, which give extensive internal and international communications to and from every corner of the Union, to the north with Canada, and south with Mexico.

In point of fact, the **United States** are self-sustaining, one and all, and by their transit-arteries are able to send to the coast for transport innumerable, varied and valuable products from each kingdom of nature; the harbours, seas, and coasts being "open" the whole year round.

20. The natural gravitation, which, in regions *a* and *c*, is by the gentle slope to the sea-board, and by the Mississippi and its affluents, in the central region, has now, by the introduction of good roads, railways, and connecting canals, been reduced to a scientific gravitation ; every corner of the republic and the adjoining nations being easily reached.

The lakes represent *a common bond* between the States and Canada, while the great rivers stand as the natural waterways of the central continent.

21. The rapid increase of agricultural activity has given rise to inland emporiums in great number,—cities well placed, either on lakes, at junctions of rivers or railways,—such as Chicago, a gravitating centre for all the north central districts ; St. Louis, at the junction of the Mississippi and Missouri ; Cincinnati, Memphis, and many others ; and these act as distributing centres for the adjacent circles.

22. The eastern seaports, being the nearest to Europe, are the great inlets and outlets of the continent ; but with increased trade between the United States and “the East,” San Francisco and other western ports must rise to still higher eminence. New Orleans is the great outport for the Mississippi Valley.

23. Thus, then, the map of North America is easily read. There are no physical features to impede free intercourse, and, consequently, commercial activity is solely based on cost, speed, and destination.

There is no real necessity to apply to other countries for aid, but reciprocal commerce is always good, and most advantageous to those who have most to give in exchange. The immense area of the American Union gives opportunities to every productive labourer to turn his attention to his special industry, while free interchange enables him to supply himself with all the necessaries, comforts, and luxuries of his age and of civilised life.

The total area of the United States is over 3,500,000 square miles ; there being just twice as many of the people engaged in

agriculture as in the mining, manufacturing, and mechanical industries.

24. The commercial designation of "States trade" covers all outlets, whether on the Pacific, Atlantic, or "the Gulf" shores.

25. Among the many and varied mineral resources, we find alum, asphalt, anthracite, antimony, asbestos, bergmahl, basalt, bitumen, bismuth, building-stone, coal, copper, clays, chromium, corundum, dolomite, fireclay, gold, gypsum, granite, graphite, grindstones, fluor spar, flagstones, honestones, hornblende, iron, jade, kaolin, lead, limestone, lithographic stones, mica, manganese, mercury, marble, marl, mottled ochre, millstones, nickel, nitre, oxide of titanium, potter's clay, pipeclay, petroleum, porphyry, phosphates, salt, silver, slate, sandstones, soapstone, syenite, serpentine, sulphur, sulphuret of iron, sulphate of alumina, talc, whetstones, and zinc.

26. Coal abounds in vast beds; the coalfields of the Carboniferous system are computed at 192,000 square miles, excluding the "Rockies" and the Pacific regions. Pennsylvania is, as yet, the chief centre of this industry,—yielding three-fourths of the whole production,—next Ohio, Illinois, Iowa, Indiana, Missouri, and Virginia. The Appalachian field extends some 720 miles by 280; at Pittsburg the seam is ten feet thick, and runs 225 miles by 100. The Alabama fields spread about 6000 square miles,—the Warrior and Canaba beds are well known for good coal; the Coosaw bed is not yet developed. Arkansas has an excellent coal similar to that of Pennsylvania, and covering nearly 1200 square miles. Anthracite is mined in Pennsylvania. Good coal, easily worked, is found on the west coast, extending to Vancouver.

Antimony.—Sevier country claims the largest beds ever discovered.

Copper at Marquette, on Lake Superior; this district furnishes three-fourths of the entire yield.

Gold principally in California.

Gypsum in New York, Maine, Virginia, and from Arkansas river, in Indian Territory, to the Rio Grande.

Iron.—The great centre is the south side of Lake Superior, —Negaunee,—here, the land is literally honeycombed with mines ; it is also largely worked in many other States. Pennsylvania and Arkansas yield hematite iron, &c.

Lead, chiefly in Illinois, Missouri, and Wisconsin.

Manganese.—Polk country, it is said, has the largest deposits in the world ; with limonite ore, coal, and limestone in close proximity.

Phosphates in South Carolina.

Petroleum, chiefly in New York and Pennsylvania, in a tract of country covering 160 miles by 40 ; also in Kentucky, Virginia, Washington Co., Ohio, California, &c.

Solid bitumen and asphalt at Santa Barbara in California.

27. The United States cover all zones, from the temperate to the tropical, and, isothermally, it includes all European climates ; for example, Florida is isothermally related to Alexandria, South Carolina to Greece and Italy ; Philadelphia to Belgium, London, and the Crimea ; whilst the northern States rank with Sweden and North Russia.

This vast area may be divided into *three zones*, from north to south—(a) the Grain Country, (b) the Tobacco Country, and (c) the Cotton Country.

28. The agricultural products embrace a very great variety ; among the chief are, barley, beans, beet and other roots and vegetables, cotton, flax, forest trees of four or five hundred kinds, fruits of both temperate and sub-tropical climes, grass and forage, ground-pea, ground-nuts, grapes, hemp, hops, maize, mulberry, maple for sugar, millet, oats, pitch, pasturage for dairy-produce (bacon, &c.), peas, potatoes, pulse, rice, red clover, rye, root-crops, squash okra, sorghum, sugarcane, tobacco, turpentine, tea, the vine, wheat, and woods.

29. Cereals thrive throughout the States. Wheat is the special grain in the east, and centre, and along the Pacific shore. New York and Chicago are the centres of the grain-trade ; St. Louis, New Orleans, and San Francisco stand also very high. Maize is the "corn" of Ohio, Kentucky, Illinois,

Indiana, Tennessee, and Missouri. Rice in South Carolina and the southern swamps. Oats, rye, and millet scattered throughout many of the eastern States; rye being a favourite crop in Alabama.

Cotton thrives from 39° N. to the south shores, and is a special growth in Alabama, Georgia, Mississippi, Carolina, and Tennessee, together with the southern States, more west. The cotton of the South Sea Islands is well known and esteemed.

Fruits comprise apples, apricot, cherry, fig, grape, lemon, mulberry, nectarine, olive, orange, pear, plum, peach, pomegranate, strawberry, &c., with English almonds and walnuts in California.

Forests are many, of vast size, and comprise between four and five hundred varieties of trees, such as ash, black walnut, beech, birch, basswood, cedar, cherry, cottonwood, chestnut, dogwood, elm, gum-trees, holly, hickory, hemlock, locust, ash, lime, magnolia, maple, oak, poplar, pine, redberry, spruce, fir, sassafras, sourwood, sycamore, tulip-tree, &c. The total forest area is estimated at 489,280,000 acres, or 26.4 per cent. of the superficial area.

Hemp and **flax** in the west and centre, chiefly Ohio, Kentucky, Missouri, and Virginia.

Hay principally in New York, Pennsylvania, and Ohio.

Mulberry grows spontaneously in the south.

Olive in California; a vast industry at Santa Barbara; and it is stated that the olive can be successfully grown from San Luis Obispo to San Diego, and, possibly, in a few districts in Georgia, but nowhere else in America.

Sugar principally in Louisiana, Florida, Georgia, and Texas.

Tea grows as luxuriantly in Carolina as in China; and generally in the south.

Tobacco begins at 40° N., and is a staple growth in Virginia, Maryland, Kentucky, and Tennessee.

Vine in Ohio, Pennsylvania, Indiana, California, &c. The grapes of El Paso del Norte are famous. The wines of

California are becoming noted. Other good wines and grapes are Scupperong, Catawba, and Delaware varieties, Warren, Clinton, Lenoix, Concord, Calmar, &c.

30. Local Trade Movements.—The United States connect, from the many *railway* centres of the northern States, with Canada, and, in the south, with Mexico; the "*link*" lines also, throughout the country, give rail facilities, from the ports on the east coast, direct to those on the south or west. Further, the *waterways*, whether river, canal, or lake, join one river-basin with another, and territory to territory, giving unsurpassed transit facilities.

Thus, commercial movements of all kinds can be effected with the least degree of impediment; and any port on any sea-coast be readily and easily reached direct from every internal point, north, south, east, or west.

Great centres, whether of railway converging points, industrial or emporium entrepôts, spring up and attain prosperity, with marvellous rapidity, in America. Concerning the growth of these cities, notably Chicago: "She is the Queen City," says a reviewer; "the centre and outlet of such an agricultural area as can nowhere else be found on the globe. She is already the third manufacturing city of the American continent; the total value of her yearly trade is now more than \$1,000,000,000, and 15,000 vessels of 5,000,000 tons go in and out in the year."

31. Statistical returns give, in 1870, the population about $38\frac{1}{2}$ millions, equivalent to $10\frac{1}{2}$ to the square mile. From 1870 to 1874 the total imports averaged $111\frac{2}{5}$ millions a year, of which Great Britain supplied 33 millions; the exports averaged $115\frac{4}{5}$ millions, of which $62\frac{1}{2}$ went to the United Kingdom. The staple exports were bacon and hams ($4\frac{1}{2}$ millions), cheese ($2\frac{1}{2}$ millions), wheat ($14\frac{1}{5}$ millions), maize ($5\frac{3}{4}$ millions), flour, &c. (3 millions), cotton ($29\frac{3}{10}$ millions), oilseed-cake (1 million), tobacco ($1\frac{7}{8}$ millions), and wood ($1\frac{3}{4}$ millions). The staple imports were alkali ($1\frac{1}{8}$ millions), cotton piece-goods ($2\frac{1}{2}$ millions), haberdashery and millinery

(1 million), linen (3 millions), iron and steel ($5\frac{1}{2}$ millions), and woollens and worsteds (£4,000,000).

Authorities state that there were, in 1870, 956 cotton manufacturing establishments, 2891 woollen-factories, 386 pig-iron factories, 2653 foundries, and 102 forges.

In 1880 the **population** had risen to about $50\frac{1}{2}$ millions, and in 1884 was estimated at $55\frac{1}{4}$ millions.

From 1880 to 1884 the **total imports** averaged annually 137 millions,—in 1885 they were $115\frac{1}{2}$, and in 1886, 127 millions; the **exports** averaged $158\frac{7}{8}$ millions,—in 1885 they were $145\frac{3}{8}$, and $133\frac{1}{2}$ millions in 1886.

From 1880 to 1884 the **exports to Great Britain** averaged yearly $96\frac{7}{8}$ millions,—10 millions less in 1885; while the **imports** from the United Kingdom averaged $28\frac{7}{10}$ millions,— $6\frac{7}{10}$ millions less in 1885. The **staple exports** in 1885 were, cotton ($26\frac{1}{2}$ millions,—the average from 1881 to 1885 was $30\frac{1}{2}$ millions a year), wheat $16\frac{7}{10}$, maize $5\frac{1}{2}$, or a total of 22 millions,—(the average from 1881 to 1885 being $26\frac{1}{2}$ millions), bacon and hams ($60\frac{1}{2}$ millions), cheese ($1\frac{7}{8}$ millions), lard ($1\frac{1}{2}$ millions), petroleum ($2\frac{1}{8}$ millions), live animals (3 millions), fresh beef ($2\frac{1}{4}$ millions), tobacco ($2\frac{1}{2}$ millions), leather ($1\frac{1}{2}$ millions), and sugar ($2\frac{7}{8}$ millions). The **staple imports** in 1885 were cotton goods ($2\frac{1}{4}$ millions,—averaging from 1881 to 1884, $3\frac{1}{2}$ millions), iron ($4\frac{1}{2}$ millions,—average $7\frac{1}{2}$), linen goods ($2\frac{1}{4}$, average $2\frac{1}{2}$ millions), woollens (3 millions), alkali and jute goods (1 million each).

In 1880 there were stated to be 756 cotton and 1005 iron and steel factories.

32. We thus draw conclusions that, from 1870–84 the population *increased* about 40 per cent. The total imports *rose* on the average amounts something over 22 per cent., but 1885 and 1886, as single years, were *below the average* of the five preceding years; 1886, however, showed a little recovery.

The total exports *rose* some 36 per cent.; but 1885 and 1886 *receded* in sympathy with the imports.

In 1870–74 period Great Britain held quite 53 per cent.

of the total exports and 30 per cent. of the imports; to preserve the same ratio in 1880-84 the figures should have been £84,170,000 exports and £41,000,000 imports, but they really were £96,830,000 and £28,700,000, showing a good gain on exports, but a heavy loss on imports, more than counterbalancing the gain on exports. As a single year, 1885 was a long way below the average. Therefore, in 1880-84 period we held 62 per cent. of the exports and about 21 per cent. of the imports.

With regard to staple exports, bacon and hams increased in a most extraordinary degree, namely, nearly fifteen times; cheese fell about 33 per cent., but wheat rose just over 15 per cent.; maize remained quiet; cotton slightly gained on the average, but lost about 14 per cent. on the single year of 1885; and tobacco rose over 33 per cent.

As to imports, England supplied alkali and cotton goods to about the same extent as previously; linen fell about 25 per cent.; iron rose about 40 per cent. on the average, but woollens receded.

The result of the States trade, as a whole, is encouraging. The removal of barriers, raised by the protective system in the United States, is attracting much attention. This would of itself insure a period of prosperity for all our great manufacturing industries, especially the pig-iron trade, which, in 1886-87, reached 36.8 per cent. of the total exports; but, against this, is the continued tendency of ultimately extinguishing this trade by making the States self-sufficing.

The resources of the United States are so vast, and the means of international communication, by mail steamships, from all the great seaports, on both the east and west coasts, to all parts of the world, so comprehensive, that to speak of trade as being likely to languish would be absurd; what we have to see to is, that we can hold our own against the "States" in the supply of any requirement, whether in intellect, manufacture, or raw material.

Examination Questions on Canada and United States.

1. Name the provinces which constitute the Dominion of Canada, and write a general description of its industries.
2. State how the colonists have overcome the natural barriers to commercial intercourse.
3. Describe the harbourages, trade-centres, and gravitating areas of merchandise.
4. Contrast the physical features of the United States with those of the countries of the Old World.
5. What are the means of communication and transport in the States, and to what state of advancement have they reached?
6. What are the distinctive resources of the United States? What their present industrial and commercial position?

MEXICO AND CENTRAL AMERICA.

Geographical position, 1—Geographical features, 1, 4—Commercial position, 2, 3—Commercial activity, 3, 8, 12—Climatic divisions of Mexico, 5; and of Central America, 7—Physical features in relation to resources, 6, 7—Ebb and flow of merchandise, with natural centres, 9—Centres of distribution, coast and inland, 9–11—The Isthmus of Panama, 12—Natural trade division, 13—Mineral resources of Mexico, 14; of Central America, 18—Localisation of same, 15—Agricultural resources of Mexico, 16; and of Central America, 18—Means of intercommunication 8, 17, 19—Political divisions, 18—Trade statistics of Mexico, 20; Central America, 22—Review of the movements of trade and population in Mexico from 1873 to 1884, 21; and in Central America, 23—Examination questions, p. 295.

1. These countries connect the two continents of North and South America; the former, by the broad end of Mexico, and the latter, by the Isthmus of Panama, at the narrow end of Central America. They are elevated, and slope, on either hand, to the sea-frontiers; on the east, to the Gulf of Mexico and the Caribbean Sea, and on the west, to the Pacific Ocean.

2. Panama is in the direct course between Europe and Australasia, working westwards; the West India Islands lie off the eastern shores, while the continents of North and South America are close at hand.

3. Considered economically, this area is marvellously endowed. The gifts of nature are so abundant, valuable, and varied, that the trade returns ought to be very much larger; but the people are passive, and the present seeming prospect of intelligent utilisation of its resources and unique geographical position lies in the introduction of foreign capital and labour, which should yield good returns.

4. The surface of Mexico is varied, and is traversed by a

range of mountains continuing those of the North American continent. They form a complete watershed between the Atlantic and Pacific Oceans, and, dividing into two branches, enclose an elevated tableland. The country rises so abruptly from both coasts that within a narrow space nearly every climatic condition occurs; the low country being hot and unhealthy, and the tableland enjoying a mild, equable temperature, rising in high altitudes to the severity of the Arctic regions.

5. Thus the country is divided into *three climatic regions*—(a) **the tropical**, which includes the low lands on the east and west, with luxuriant vegetation; (b) **the temperate**, between 2500 and 5000 feet above the sea-level, where flourish all the cerealia of Europe; and (c) **the cold region** of the mountain heights.

6. The high lands indicate **mineral resources**, the more precious metals being present in great abundance.

7. **Central America** is very similar, in economic resources and aspect, to Mexico; long ranges of mountains forming tablelands in the central parts of the country. There are two plains, **Nicaragua** and **Comayagua**, healthy and salubrious districts; but the low-lying lands of the "**mahogany coasts**" are hot and unhealthy.

8. Although the riches of this territory are inexhaustible, **the people are passive**, and commercial activity is hardly known. Transit is effected by bullock-tracks, except where the short rivers assist in floatage, and the great lines, running from the United States, convey merchandise to the ports.

9. Each State has its central town, and the gravitation is, in the main, to the east coast. **The ports** on this coast represent the great centres; notably **Vera Cruz**, for Mexico and La Puebla; **Truxillo**, for Honduras and the plain of Comayagua; **Greytown**, for Costa Rica; and **Chagres**, for Panama.

10. There are smaller places of export only, such as the mahogany ports; notably **Tampico**, **Tuxpan**, **Campeachy**, **Belize**, **Caballo**, **Aspinwall**, &c.

11. **The west coast** is but little used, except for French

operations in the north-west; with Mazatlan, Acapulco, Tehuantepec, Istapal, Panama, as centres.

12. The chief scene of commercial activity is across the Isthmus of Panama, where an immense transit is carried on; and, when the canal is an accomplished fact, the trade of these countries, as also of the West India Islands, must greatly expand, for they lie midway between the east and the west, and, avoiding the circuitous voyage round Cape Horn, must draw much shipping through the canal.

13. Mexico and Central America form a distinct trade,—mahogany chiefly,—and having an extensive sea-board both on the Atlantic and Pacific Oceans, should be available for a much larger “turnover.” These countries lie in *the tropical and sub-tropical zones*. The area of Mexico is 734,948 square miles.

14. Mexico is one of the richest mineral countries in the world; its resources are, however, but feebly worked. There are amygdaloid, asphalt, copper, coal, carbonate of soda, cobalt, clay-slate, gold, granite, iron, jade, lead, limestone, mica, mercury, natron, obsidian, plumbago, petroleum, porphyry, quicksilver, saltpetre, silver, syenite, serpentine, rock-salt, tin, and topaz.

15. Gold and silver are literally scattered from end to end of this area.

Silver is the great mining industry of Mexico, and beyond gold and a few leading minerals, the rest are left untouched. The chief silver-mines are at Real del Monte, Pechuga, San Luis Potosi, &c.

Quicksilver is obtained from Sonora.

16. Owing to climatic conditions, the products of the soil have a vast range, and consist, among others, of aloes, barley, beans, banana, cacao, coffee, cotton, chocolate (cochineal), drugs, dyewoods, dye-stuffs, flax, fruits many and various, forest wood,—American ebony, Brazil wood, Campeachy wood, caoutchouc-tree, dyewood, fustic, ironwood, logwood, mahogany, rosewood, palms, oak, &c.,—indigo, jalap, Jesuits’ bark, maize,

maguay or American agave, manioc,—or cassava (tapioca),—olive, pulse, potatoes, pasturage products, pita-flax, pimento, rice, spices, sarsaparilla, sisal-hemp, silk, tobacco, the vine,—the wines of Parras and Tehuacan,—and wheat.

The whole country is wondrously fertile ; the most cultivated parts are around the larger towns or mining districts ; other localities being left almost to nature.

Forests favour, principally, the coast region, yielding, according to altitude, useful, ornamental, cabinet, or dyewoods.

Maize is the Mexican “grain,” and universally cultivated.

Pastures are of great extent, and furnish, from the flocks, wool, tallow, hides, and skins.

Wheat will grow in any part of Mexico, at the height of 7000 feet, and many districts are said to yield five times the return of English wheat.

17. Local trade movements are chiefly by road. The great lines of railway, from the United States to and through Central Mexico, are, with branches, great auxiliaries, but more especially for international goods ; *i.e.*, goods to and from the States. The long line of sea-coast is, except at one or two points, left entirely to the slowly crawling cattle-carts for its transport service ; and until better facilities are given, trade, except at the centres, must be heavily handicapped and languid.

18. Central America is a continuation of Mexico, rather more tropical, but abounding in similar produce, and, in a trade sense, covering Yucatan, Campeachy, Belize, Honduras, Guatemala, San Salvador, Nicaragua, Costa Rica, and Panama.

The mineral resources are similar to those of Mexico.

These are the true mahogany and dyewood coasts ; the same magnificent forest-growth prevails, as also the products of balsam, cacao, coffee, indigo, &c. ; but all these “earth-gifts” are as poorly worked as in Mexico. The mineral resources are still more neglected, agricultural pursuits being nearly the sole occupation.

In round numbers, the total area is about 200,000 square miles.

19. Local Trade Movements.—Except for a few short lines of rail and the Panama line, transit is still by road; but the project of the opening of a Panama canal lends hope to the establishment of an important trade, both in native produce and for goods in transit. A canal is also projected in Nicaragua.

20. Trade statistics of Mexico tell us that, in 1873, the population numbered a little over $9\frac{1}{4}$ millions, or thirteen to the square mile.

From 1870 to 1874 the total imports averaged $5\frac{7}{10}$ millions a year, of which Great Britain supplied 1 million; the exports averaged 5 millions, of which England took less than half a million. The staple exports in 1874 to us were mahogany (£345,000), cochineal (£45,000), hemp (£36,000), and dye-woods (£30,000). The imports were cotton goods (£660,000), machinery (£125,000), linen (£105,000), and iron (a little less than £80,000). About 3 millions of the total exports were silver, of which Great Britain took less than £2500.

In 1884 the population was $10\frac{1}{2}$ millions, or fourteen to the square mile. From 1881 to 1885 the total imports averaged annually $7\frac{2}{3}$ millions, of which England supplied £1,367,000; the exports averaged $8\frac{1}{4}$ millions, Great Britain taking £665,000. These figures are calculated at four shillings to the dollar; of the total exports the precious metals formed about seven-ninths.

The staple exports to us, in 1885, were mahogany (£300,000), dye-stuffs and woods (£110,000), hemp (£38,000,—£95,000 in 1883), and sugar (£11,000). The imports from us were cotton goods (nearly half a million), linen (£80,000), iron, machinery, and woollens. Authorities state that there were eighty-eight cotton-factories in Mexico.

21. Thus it would appear that from 1873–84 the population increased about 11 per cent. The total imports rose nearly 33 per cent., and exports 66 per cent. *Of this trade, in 1870–74 Great Britain only held direct intercourse to the extent of a little less than 8 per cent. exports and 20 per cent.*

imports. *To preserve the same ratio, the figures for 1881-85 should have been £656,000 exports and £1,475,000 imports; a glance at the true figures of £665,000 and £1,367,000 will show how nearly we kept pace with the rise.*

With regard to staples, mahogany and hemp kept *nearly stationary*, but dyewood increased 250 per cent. ; cochineal fell, but sugar appeared to be coming forward. Hemp is a very fluctuating product. Cotton imports *declined* over 33 per cent. and linen 20 per cent., while iron and machinery fell *heavily*. **Mines of petroleum and asphalt and coal** of immense value and extent have been discovered at no great distance from the coast. *With the aid of foreign capital and efficient labour, and a diminution of heavy protective duties, there is a fine mineral opening in this country.* In fact, with its glorious climate and luxuriant soil, Mexico ought to assume an important place in the world of commerce, and abundantly enrich herself and other nations by a liberal "*commutatio mercium*."

22. **Central America** gives no returns of total trade; but, from 1870 to 1874, the exports to Great Britain averaged $1\frac{1}{2}$ millions yearly, and the imports just over a quarter of a million. The staple exports in 1874 were coffee (three-quarters of a million) and indigo (something less than £200,000), while cotton goods valued at £50,000 formed the staple import.

From 1881 to 1885, the exports averaged $1\frac{1}{4}$ millions a year, and the imports fully four-fifths of a million. The staples in 1885 were precisely the same; the valuation very little altered, with the exception of cotton goods imported, which had risen to £380,000.

23. From this, we trace that direct trade with Great Britain rose 10 per cent. on exports, and increased nearly 200 per cent. on imports, from 1870 to 1885. The increase in our sales of cotton goods was a striking feature, the value rising nearly 700 per cent. ; otherwise trade was very quiet.

The vast natural resources of this territory should induce a large reciprocal trade.

SOUTH AMERICA.

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1. The pear-shaped continent of South America, extending through nearly seventy degrees of latitude and fifty of longitude in the widest part, tapers to a peninsula point in the south.

2. The continent includes the separate countries of the United States of Colombia, Venezuela, the Guianas, Brazil, Uruguay, Paraguay, La Plata, Chili, Bolivia, Peru, and Ecuador.

The sea-coasts are always open, and in direct course with the whole world.

3. The physical aspect of South America is somewhat similar to that of the northern continent, with its mountain-ranges, its vast plains, and its majestic rivers. The great mountain-range of the west is continued throughout South America, somewhat nearer the west coast; but there is no corresponding eastern range. There is *hilly land* in Brazil and Uruguay, also in the northern States, but no chain of mountains that presents a barrier to the rivers, and compels them to alter their course to the southward. The consequence is, that the streams flowing down the Andes on the west have no difficulty in forcing their way seawards in a straight course; and in the Orinoco, Amazon, and San Francisco, we observe a general west to east direction, these rivers discharging their waters into the Atlantic Ocean. The rivers Uruguay, Paraguay, and Parana are exceptions; flowing through the plain of La Plata, they strike the high lands of Brazil, and, being deflected, run, more or less, in a southerly direction; having their embouchures in the estuary of the Rio de la Plata, which itself faces eastwards and mingles with the Atlantic. All the entrances to these rivers, therefore, face the Old

World, and are consequently favourably situated for commerce. How very different would have been the trade capabilities of South America, had these rivers had their courses westwards instead of eastwards; had their mouths faced the apathetic nations of the East, instead of the business nations of the West! Happily placed in this respect, South America draws to herself yearly ever-increasing commerce.

4. On the west coast the Andes are so close to the shore that mountain-streams exist in abundance, but no commercial rivers.

5. Compared with the northern continent, South America is richer in the rarer metals and other minerals, which lie embedded in the western heights. In agricultural produce, again, so much of the continent lying in the tropics, a variety of tropical products is procurable, which North America cannot supply. The forests are of finer growth, and contain rarer woods; the plains and pampas are as extensive, and stretching south, enable sheep and cattle rearing to be carried on with great success and to an almost unlimited extent.

6. Unlike North America, these riches have not been developed. *The northern continent is peopled by the most energetic nations of Europe*, who have assisted nature and produced rare results. They have built towns, and busy districts have sprung up; railways are constructed, and commercial activity is universal.

What a different picture in South America! The conquest of this great continent was by violence, not by industry and commerce. The Spaniards and Portuguese, with little or no productive energy of their own, have done nothing to instil the spirit of enterprise into the native races whom they despoiled, and over whose feeble and passive descendants they now rule. **The country has been left to itself**, and just outside the Indian clearings, maintains its pristine wildness. Nearly everywhere, except along the coasts, South America represents an expanse of immeasurable resources, awaiting human industry, intelligence, and skill. Modern methods

and appliances, harbour-works, and means of communication, wherever introduced, show their effect in advancing trade.

7. Being, as a rule, still out of the reach of railways, the circulation of merchandise must be natural. Nature's barriers define movements clearly and distinctly.

8. **New Granada**, lying in the north-west angle, is bounded *north* by the Caribbean Sea, *east* by two natural frontiers, a mountain-chain from the extreme point of Coajira to the river Meta; then the river Meta itself, a tributary of the Orinoco, followed by a political boundary running north to south direct, a little to the west of the Orinoco; on the *south*, by a political barrier to the river; thence, by the river Miguel, a tributary of the Amazon, to the Andes; continuing to the sea at Panguapi Bay at the mouth of the river Mira, another natural boundary. Three chains of mountains traverse the country north to south, where they meet the Andes; first, a coast chain; secondly, the Quindiu chain,—between these ranges runs the river Cauca, flowing south to north; and thirdly, the Cordillera de la Suma,—between these runs the river Magdalena, which unites with the Cauca just below Mompoz. To the east of the Cordillera extend the plains and forests of the Orinoco and Amazon basins.

This State is said to be the most diversified of any in South America, both as regards soil and climate. Owing to the wide ramifications of the mountain-chains, there is a large extent of country most favourable to industry at the elevation of from five to ten thousand feet. The low lands, on the other hand, are hot and unhealthy.

9. With such advantages, **agriculture will be the staple work**; but some specialties are manufactured, and draw a fair concentration of people to large valley towns.

10. With two extensive sea-boards, the northern shores have ready access to the United States and West India Islands, and the western, to the Asiatic continent and the west coast of the Americas; and both, to the partly cut Panama Canal. But trade is not energetic enough to bring out this geo-

graphical and commercial position to advantage. **Commerce is carried on mainly by foreign capital and labour**, the natives being classed as "**passive**" as far as foreign commerce is concerned.

11. The great distributing and gravitating centres lie on or near the coast; in the north **La Cienega, Santa Marta, Cartagena, and La Hacha**; in the west they are insignificant, **Buenaventura** on Choco Bay, **Santa Barbara**, and **Barbacoas** on the river **Patia**, and its tributary, the **Televibi**, being the most important. Inland centres are **Mompox, Antioquia, Cartago, Socorro, Santa Fé de Bogota, &c.**

12. Natural gravitation, then, is—1st. From the shore to the first range,—to the sea-coast and Gulf of Darien is by the small streams and horse-roads. 2nd. Between the first and second range,—is by the river **Cauca**, flowing in the interjacent valley, and gravitating first to **Cartago** and **Antioquia**, and thence to **Mompox**, finding an exit at the mouth of the **Magdalena** at **Sabanilla** or **Cienega**. 3rd. Between the second and third ranges,—is by the river **Magdalena**, having the same exit; and on the east of this range,—is by the rivers **Orinoco** and **Amazon**, having an eastward course and flowing out into the Atlantic.

13. **Venezuala** lies to the east of **New Granada**, and is bounded north by the Atlantic, south and east by a natural boundary, the **Sierras Parima** and **Pacaraima**.

14. The northern and southern parts are mountainous, and, between these, extend the plains and llanos of the **Orinoco**, beyond the coast-strip. The whole country is watered by this river and its many tributaries; therefore, with the exception of the coast-line, gravitation is naturally entirely confined to the **Orinoco** basin.

15. Coast distributing centres are **Maracaybo** for all the north-west; **Coro, Cabello, Caracas, Barcelona, and Cumana** for the north; and **Angostura, San Fernando, Achaguas, Nutrias, &c.**, for the **Orinoco** and inland districts.

16. Here again agriculture is the staple industry; although

the rich mines of Coro and the Orinoco attract many workers. Where cultivation is carried on, it succeeds, up to an elevation of eight or nine thousand feet. The valleys, plains, and tablelands of the coast-range are the chief scenes of cultivation and active industry.

17. Combined with an extensive coast and available harbours, is the great artery of the Orinoco, which aids materially in the opening-up and utilisation of the resources of this region. As in other South American States, foreign capital finds reproductive investment, to a large extent, when laid out by intelligent enterprise, in working the rich local earth-gifts and in the pursuits of trade.

18. The *Journal Officiel* of 8th January 1888 says: "Venezuela is capable of great commercial development; but for working, labour is required, and cannot be obtained. The valuable mineral and agricultural resources are at present almost entirely neglected, and the trade with Europe diminishes year by year. There is no doubt that this is a country where capital, wisely expended, would bring in considerable returns.

19. The Guianas,—British, Dutch, and French,—lie to the east of Venezuela, and are bounded *north* and *east* by the Atlantic, *south* by the Tumucuraque Mountains and river Oyapok, and *west* by branches of the Parima, to the confines of Venezuela.

20. The Guianas are low, flat countries,—where the greatest care has to be exercised to prevent inundations by the sea,—rising to higher ground inland. The soil is chiefly alluvial, and of wonderful fertility; the climate equatorial.

21. As in Venezuela, the commercial position can only be looked at as a narrow strip of shore-land, with ample opportunities for shipment; for transit or internal trade these countries are nullities.

22. Each Guiana is well watered; British Guiana having the rivers Essequibo, Demerara, and Berbice, with many tributaries; distributing centres being confined to the coast towns of Cartabo, George Town (Demerara), and New Amsterdam

(Berbice). **Dutch Guiana** is watered by the rivers **Saramacca**, **Surinam**, &c., with a *centre* in **Paramaribo**; and **French Guiana** by many small streams; and *centres* in **Cayenne** and **Oyapok**.

23. The coasts are in direct course for Europe, North America, the whole eastern coast of South America, and the West India Islands.

24. **Brazil** occupies the larger portion of Central South America, and is bounded *north* by Venezuela and the Guianas, *east* by the Atlantic Ocean, *south* by Uruguay, La Plata, and Paraguay, and *west* by Bolivia, Peru, and Ecuador.

25. All the northern portion is occupied by the llanos and the wooded plains of the Amazon. The rest of Brazil is mountainous, alternating with plain, valley, and tableland. Besides the **Amazon** and its many affluents, there are the important rivers of **Parnahiba**, **San Francisco**, **Parahiba**, **Parana**, and an innumerable number of smaller rivers and streams.

26. The aspect of the **Brazilian coast** is very different in different localities; north and south being low, flat, and swampy; but between these stretches, bold, rugged, and precipitous.

The extent of sea-coast, with some of the finest harbours in the world,—although, for the length of sea-board, these are somewhat scanty,—and the numerous natural waterways, assure Brazil a position of commercial importance; but the present difficulty of easy internal distribution (*observe, the rivers are nearly all down-stream currents only*) deters commerce. Barred on the west by the Andes, Brazil can only look to her own resources for trade; but these are so varied and rich, that if this territory were only served by modern transit facilities and freer intercourse, she might rival the northern continent of America in the magnitude of her operations.

27. Gravitation is "down-stream" to the shore, *where the great centres lie*; and these are **Para**, **Maranhão**, **Parnahiba**, **Ceara**, **Natal**, **Parahiba**, **Pernambuco**, **Sergipe del Rey**, **Bahia**, **Rio Janeiro**, **Santos**, **Paranagua**, and **Porto Alegre**. These

distributing ports supply all the inland districts, and receive the produce sent down, for shipment, from the interior. **Manaos**, up the Amazon, is a distributing centre for the north-west.

28. All these countries are exporters of raw materials only, looking to other nations to supply manufactures and all requirements in exchange.

29. Uruguay is a small State lying to the south of Brazil, and having a water boundary on all other frontiers, namely, the river Uruguay on the west, the estuary of the Rio de la Plata on the south, and the open Atlantic on the east.

30. The great distributing centre for all Uruguay is Monte Video, assisted somewhat, for international and internal circulation of goods, by Paysandu and a few small ports on the Uruguay.

31. The country is an extensive undulating plain, relieved, in the interior, by a few hills and ridges of moderate elevation; it is well watered, and rejoices in a mild and healthy climate.

32. Paraguay is a small State bounded north by Brazil, east and south by the river Parana, and west by the Paraguay. It does not enter the category of commercial States; *fiscal restrictions are so severe that, for trade purposes, this territory is a complete nullity.*

33. A range of hills traverses north to south, gravitating on the one hand to the Parana, with Villa de la Encarnacion, and on the other to the Paraguay, with Asuncion, as centres. Corrientes, on the La Plata side of the Paraguay, is the great transit centre and emporium for international trade; very little commerce being transacted direct.

34. La Plata includes all the rest of South America,—Patagonia to the Straits of Magellan,—and is bounded on the west, by the massive chain of the Andes, and north, by Bolivia.

This country is more progressive and enterprising than any South American State. Railways have been introduced, and are linking town to town, creating centres and emporiums, and seeking to join nation to nation by proposed international

lines ; that drawing the riches of Bolivia to Buenos Ayres, being one of the most important.

35. The country spreads out into immense plains or pampas, relieved, here and there, by high lands, which, however, are nowhere lofty, and watered by the grand rivers of "the Plate."

36. *For the size of the country, La Plata, or the Argentine Confederation, has less sea-board than any South American State ; but, on the other hand, the natural waterways are more utilised, and inland centres more common.*

37. The southern plains of Patagonia are everywhere covered with a coarse shingle, and may thus be called economically unimportant ; but the middle pampa is a fine pasture-land, covered with flocks and herds, supplying the well-known "Plate" wool, meat extracts, tinned and frozen meats, skins, hides, and tallow ; while the north-east, again, enclosing Gran Chaco, is desert.

38. The alluvial soil by the rivers is well adapted for the growth of cereals, and the climate is dry and healthy.

39. Those foreigners who have carried capital, labour, industry, and business generally, to La Plata, have well availed themselves of the geographical position for commercial purposes, by reaping from the alluvial soil maize and other cereals, utilising the unlimited pastures for every animal product, by improving and dredging the harbour and approaches of Buenos Ayres, by constructing railways across the continent to attract the Western trade, and drawing by the rivers and existing means of transit a very large portion of the Bolivian trade.

Free intercourse, an easy sea-passage, and, if the Western produce comes forward, the avoidance of rounding "the Horn," are incentives to carrying out these projects and attracting a large maritime commerce.

40. Buenos Ayres is the great distributing centre, emporium, and entrepôt of the Argentine Confederation. Smaller centres on "the rivers" are San Nicolas, Rosario, Parana, Santa Fé

(with **Corrientes** for Paraguay, on the Parana); and **Concepcion** and **La Cruz** on the Uruguay.

41. **Inland centres**, for the receipt of the products of the plains, are becoming more numerous. Business ability is all imported; but there is reason to believe that **La Plata** will be the first South American State to rival North America in its commercial results.

42. **West of the Andes** a strip of country extends to the Pacific. Of this strip, **Chili** forms the chief part, spreading 1000 miles north and south, trending

43. Southwards to **Cape Horn**, and bounded on the north by **Peru**, having a fine coast-line, with many harbours and roadsteads, on the Pacific.

44. Since the **Andes** are the great storehouses of mineral treasures, the west coast centres export ores and metals, rather than agricultural produce, though the wheat of **Chili** is prolific and appreciated. The most productive parts of **Chili** are towards the south. Northwards the country is bleak and sterile.

45. The coast-line is bold and rugged, with deep water close in-shore. The climate is one of the healthiest in the world; and, after the rainy season, the whole of the more favoured parts is decked with flowers and vegetation.

46. Gravitation of merchandise is limited to the tract of land lying between the mountains and the sea, where the streams, roads, and railways circulate goods between the sea-towns and inland districts.

47. **Valparaiso** (for **Santiago**) is the central emporium of **Chili**; others being **Arica**, **Iquique**, **Coquimbo**, and **Chanaral** in the north, and **Constitucion**, **Talcahuano** (for **Concepcion**), and **Valdivia** in the south.

48. All the important towns of agricultural, mining, and industrial life, lie near the sea. Gravitation to the ports named, or to minor ones between, is easy, and distribution is readily effected by railway.

49. **Bolivia** is mainly an inland State, lying between **Brazil**

and the Andes. Only a very small part of the country approaches the sea-coast. *Cobija is the sole distributing centre and port on the Pacific.*

50. Differing, again, from Peru and Chili, by reason of its position, Bolivia, mountainous in the west, slopes off, towards the east, to the pampas of the Argentine Confederation, thus giving extra facility for *an international line of rail* to connect this country with the eastern port of Buenos Ayres.

51. Bolivia abounds with mineral and vegetable produce. A fairly numerous population concentrates in various towns, which act as centres, such as La Paz, Chuquisaca, Potosi, and some others.

52. No country surpasses this State in diversity of soil, climate, physical features, and produce. Fields ranging from barren land to the richest alluvial earth ; temperature from torrid heat to sub-arctic extremes ; mountains, alternating with valleys, plains, and plateaux, are its salient distinctions. *The whole region is stored with minerals ; the eastern hill-slopes grow European fruits and cereals ; the well-watered valleys yield warm-temperate grains ; and the Yungas and heated plains of Santa Cruz, the full vegetation of the tropics.*

53. Bolivia stands as an inland State, dependent upon bordering countries for foreign trade. The result is seen in the activity of La Plata, for the chief commercial movements are through that country to the port of Buenos Ayres, comparatively little taking place at Cobija, on the west. Bolivia is, as it were, the Switzerland, physically, if not industrially, of South America ; and the prospect of future trade promises that it may become the transit State for all west coast produce to the east coast.

54. Peru stretches along the Pacific shore to Ecuador, the main range of the Andes, not far removed from the sea, running down the country. Hence the majority of movements, in commercial matters, is to the ports on the Pacific ; the activity on the eastern side of the mountains, where the land falls to the basin of the Amazon, being comparatively small.

55. The Cordillera of the Andes appears as a great barrier shutting out the eastern world. The coast-strip is only some hundred miles broad; even this is, in places, uninhabitable, being rainless; and the area for active work is, therefore, not extensive. Mining is the chief industry; agriculture only possible where the streams irrigate the land; some little industrial work for specialties is carried on. The towns are comparatively small, and commercial work backward.

56. The climate is dry. If it were not for the melting snow, and the rainfall on the mountains, swelling the rivers, this would be an arid desert.

57. The chief distributing centres are Callao for Lima; Payta for the north; Truxillo and Chancay for the centre; Camana and Tacna for the south. Distribution is effected chiefly by road, assisted, in places, by railways.

58. There are few coasts supplied with so many ports as Western South America; they are all commodious, but generally "open," and owe their existence to the abundance of mineral wealth, which crops up throughout its length; hence *wherever a successful mine has been started, the nearest available spot on the coast has been made "a port."*

59. The whole sea-board is in direct oceanic communication with the Asiatic continent and Australasia; *via* Cape Horn with Europe and Africa, and is also excellently placed for a coasting trade with North America; but for inland trade, except by way of Bolivia, the Andes bar all intercourse eastwards.

60. Ecuador, lying on the equator, as the name signifies, is bounded by Peru, Brazil, New Granada, and the Pacific.

61. The same features obtain,—the sea-level lowlands, the Andes range, and on the east of these, the broad expanse of country stretching away to the Amazon plains, and watered by tributaries of that river.

62. Here again, all activity is centred on the shore side of the mountains, where the only two towns of importance lie,—Guayaquil, the great port of Ecuador, and Quito, the inland centre.

63. The country embraces every variety of climate, from the tropical, and unbearable heat, of the low sea-coast to the eternal snows of the mountain-heights; consequently every variety of agricultural produce is cultivable.

64. The hills and slopes of the Andes are covered with impenetrable forests, estimated to cover nineteen-twentieths of the entire area of Ecuador.

65. The climate of the Quito plain is described as a perpetual spring, with frequent and sufficient rain. Farther south, in Loja, and eastwards, in the plain, there is less rainfall; while in the opposite direction, at Barbacoa, it rains nearly every day; and farther south again, rain has not fallen within the memory of man. The country round the only gravitating centre of Ecuador, Guayaquil, is inundated during the rainy season, and this produces pestilential marshes.

66. The products are so varied that there are many openings for intelligent commerce; *but capital and labour are wanted.* Hopes may be entertained that, with the opening of the Panama Canal, trade will considerably expand.

67. South America.—In a trade sense this area is the whole of the South American continent, from the Isthmus of Panama to Cape Horn on the east side, and inland to the Andes. The other, or west side of the mountains, is styled commercially the “west coast trade.”

This district includes a variety of climatic zones, from the *sugar and cotton regions of the northern shores*, through the *tobacco and coffee of the centre, the dairy-produce and pastures of the temperate, to the “tundra”* and wild vegetation of the extreme south.

The total area is about 5,000,000 square miles.

68. The products of the mineral kingdom are varied. Brazil is the chief seat of the industry, although the Guianas, Venezuela, and Colombia yield their treasures. Among these we find agate, amethyst, asphalt, alum, bitumen, beryl, coal, chromium, copper, copperas, diamonds, edible infusorial clay, emeralds, gold, garnets, granite, iron, lead, kaolin, limestone,

marble, nitrate of soda, potter's clay, petroleum, palladium, platinum, precious stones, ruby, quicksilver, quartz, rock-salt, rock-crystal, silver, sulphur, salt, sesqui-carbonate of soda, saltpetre, sandstone, tin, topaz, and zinc.

69. **Coal** round Bogota in Colombia, and Coro in Venezuela, besides vast deposits in Brazil and other parts.

Diamonds principally in Brazil.

Gold.—The Orinoco fields are said to be the richest in the world.

Copper, in vast abundance in Venezuela.

Iron, in rich quantities in many parts of Brazil and Venezuela.

The following provinces are incalculably rich in many of the above minerals, and only require intelligent working:—Antioquia, New Granada, Magdalena, Venezuela, Rio del Norte, Minas Geraes,—a very wealthy province,—Goyaz, and the western parts of the Argentine Confederation.

70. All zones of temperature being found in this area, it is possible that every known **vegetable product** should thrive. Owing, however, to difficulties of transit, &c., the cultivation of the soil is confined, in a great measure, to tracts of country not far from the sea-coast, except where railway enterprise has begun. Only about the one hundred and fiftieth part of Brazil, as estimated, is cultivated; though the soil is very fertile, and specially adapted for coffee, maize, and sugar. The vegetation, in its luxuriance, is nearly all in the palm zone.

The land is divided into four systems of mountains and four of plains,—(a) the Andes, from Magellan to Panama; (b) Parima or high lands of Guiana, irregular groups of mountains scattered over a tableland not more than 2000 feet above sea-level, extending east to west, and separating the plains of Orinoco and Rio Negro; (c) coast chain of Venezuela; and those of (d) Brazil, consisting of two great ranges running parallel to the coast, and with numerous offshoots, extending far inland.

Plains:—(a) The pampas of La Plata; (b) selvas of the Amazon; (c) llanos of Orinoco and Venezuela; (d) the sandy plains of Patagonia.

Among the varied and invaluable products of this country are arnatto, barley, balsam, banana, beans, coffee, cotton, cacao, cedar, cinchona, corozo-nuts, copaiba, caoutchouc, chiquichiqui,—a fibre-tree,—coco-nut (cochineal), cassava, dye-woods, dye-stuffs, divi-divi, dragon's blood, drugs, dates, fibres, fustic, gum-copal, green-heart, guava, ginger, haricot, india-rubber, indigo, jalap, Indian sago-palm, ipecacuanha, lemon, logwood, maté, medicinal plants, millet, maize, manioc, mahogany, mimosa, niopo, orange, pastures and products, pine-apple, pepper, pimento, piassava, resin, rice, spices, sugar, sarsaparilla, saffron, tobacco, tapioca, vanilla, vegetable ivory, wheat, and yams.

71. Coffee comes principally from the south-east; Rio de Janeiro, Santos, San Pedro, and San Paulo being the centres.

Caoutchouc from the north-east, Para being the centre.

Forests are of indefinite extent, and yield all useful, ornamental, cabinet, dye, medicinal, and shipbuilding woods. These favour the northern tracts.

Pastures are of vast extent throughout the Argentine Confederation and many other parts, yielding wool, hides, skins, horns, tallow, meat, carcasses, "extracts," &c. La Plata is the pasturage-ground *par excellence*.

Sugar chiefly from the north and north-east; Pernambuco is the centre. Demerara sugar is also well known.

Tobacco from the east, Bahia being the centre.

Of other produce, each province is capable of yielding a superabundance of many kinds, and there is ample scope for a very much larger trade.

72. Local trade movements, principally by river, road, and sea, coastwise. Many railways, also, are now completed, under construction, or projected; therefore, *with better harbours near important centres, and with unrestricted trade, the South American States are destined to play important parts in the world's commerce.*

73. The Argentine Confederation is an enterprising State. With its new works at Buenos Ayres, by which it is intended

to alter the sea-channels so as to allow vessels of large draft to come right up to the town ; by its vast extension of railways across the continent to the Andes, by which it secures so large a portion of Bolivian trade, it **appeals to all commercial men** as a country pushing well to the front rank of trading countries.

74. **Brazil**, especially in the south, joining Uruguay, comes next in facilities of internal communication ; though the northern States are still left to their natural rivers and bullock-tracks.

75. In a trade sense, **South America** can only be considered as two areas, but for "trade returns" we are able to compare one State with another. We thus get the annual "turnovers" of the following *eastern* countries :—Venezuela, Colombia, Brazil, Uruguay, and La Plata. Paraguay is practically shut out from trade, Great Britain holding no direct intercourse with her.

76. The population of **Venezuela** in 1873 is given as about $1\frac{3}{4}$ millions, or five to the square mile.

From 1870 to 1874, the **total imports** averaged 1 million a year, to which **Great Britain** contributed £400,000 ; the **exports** averaged $1\frac{1}{2}$ millions, of which we took only £80,000. The staples outwards in 1874 were coffee (£33,000) and cotton (£7000) ; inwards, cotton goods (£300,000) and linen (£65,000).

In 1884, the population was a little over 2 millions. From 1881 to 1885, the **total imports** averaged annually $3\frac{1}{2}$ millions, **Great Britain** contributing half a million ; the **exports** averaged 3 millions, **Great Britain** receiving just over a quarter of a million. The staple exports in 1885 were copper (£170,000), cocoa (£4000), coffee (£750,—both these commodities dropped suddenly from 1880), dyewoods and dye-stuffs (£11,000 each). The staple imports were cotton goods (£170,000), linen (£23,000), woollens (£22,000), jute (£11,500), iron (£37,000), and machinery (£20,000). It is stated that in 1884, there were $852\frac{1}{2}$ thousand acres under cultivation ; that

the total coffee product was valued at $2\frac{1}{4}$ millions, cocoa (£600,000), sugar ($1\frac{1}{2}$ millions), and corn ($1\frac{1}{2}$ millions).

77. From this history of "movements" we trace that from 1873 to 1884, the population *increased* about a sixth; that from 1870 to 1885, the total trade imports *rose* 235 per cent., and exports 150 per cent. This shows a vast *improvement* in commercial intercourse. **English trade** also *rose* in a very satisfactory degree, exports *rising* 212.5 per cent. and imports 25 per cent. This is partly accounted for by Venezuela **paying her debts on money lent, in produce.** *In 1870-74 we held nearly 7 per cent. of exports, and quite 40 per cent. imports; while, although our trade rose in 1881-85, we only held about 8.5 per cent. and 15 per cent. Other nations, therefore, went ahead of us in their transactions with Venezuela.*

Coffee has been a very fluctuating article, while copper has risen, as an export, to large dimensions.

Our sale of textile manufactures *declined* nearly 50 per cent.

78. In 1871 the population of Colombia was estimated at 3 millions. Less than one-tenth of the whole area was under cultivation. Transit-trade from 1870 to 1874, averaged 17 millions a year, one-third going from east to west, and two-thirds from west to east.

From 1870 to 1874, the exports to Great Britain averaged annually 1 million; the staples were cotton and Peruvian bark (a quarter of a million each). The imports from England averaged $2\frac{3}{4}$ millions; the staples being cotton goods ($1\frac{1}{2}$ millions), apparel and haberdashery (£150,000), linen (£140,000), and woollens (£100,000).

In 1881 the population was 4 millions. From 1880 to 1884 the total imports averaged $2\frac{1}{4}$ millions yearly, of which the United Kingdom supplied 1 million; the exports averaged 3 millions,—£800,000 going to England. These figures are calculated at four shillings to the peso.

The staple exports in 1885 were silver (£20,000), cinchona (£28,000), coffee (£32,000), cotton (£36,000), and dye-stuffs (£40,000); the imports were cotton goods (a quarter of a

million), linen (£43,000), woollens (£38,000), and iron (£60,000).

About two-thirds of the total exports are cinchona and coffee, and about one-sixth is precious metals. Transit-trade from 1881 to 1885 averaged 15 millions, in the same proportions as in 1870 to 1874.

79. We find, then, that from 1871 to 1885 the population *increased* about 33 per cent. The transit-trade across the isthmus declined somewhat. Increase of trade may be looked for now, owing to the supply of materials, &c., for the canal-works, and in the future by the opening of the canal. *In 1881-85 period it is seen that we did not do so well as in the previous time.* All staples *fell* very considerably.

Much attention is paid to education; and with the prospect of the Panama Canal being opened, Colombia should rise to an important place in commercial circles.

80. Brazil in 1872 had a population estimated at a little over 10 millions, or three to the square mile.

From 1870 to 1874 the total imports averaged yearly 19 millions, of which Great Britain supplied $6\frac{7}{8}$ millions; the exports were valued at 22 millions, $7\frac{3}{8}$ of which went to the United Kingdom. France followed England in the supply of the imports, but the exports went in chief to the United States after Great Britain.

The staple exports to us in 1874 were cotton ($2\frac{3}{4}$ millions, —average from 1865 to 1870 was $4\frac{1}{4}$ millions a year, and from 1870 to 1874, $3\frac{1}{4}$ millions), sugar ($1\frac{3}{8}$ millions, —with an average from 1865 to 1870 of $1\frac{1}{4}$, and from 1870 to 1874 of $1\frac{3}{8}$ millions). The imports were cotton goods ($3\frac{1}{8}$ millions), iron (nearly three-quarters of a million), linen (£200,000), and woollen goods (nearly half a million).

In 1885 the population had risen to 13 millions. From 1869 to 1872 the total imports averaged 15, and from 1882 to 1885, $18\frac{1}{2}$ millions a year; the exports for the first period averaged $18\frac{1}{2}$, and for the second $21\frac{1}{2}$ millions. Coffee equalled well on for seven-tenths of the whole exports.

From 1881 to 1885 the exports to Great Britain averaged $5\frac{1}{2}$ millions annually, and the imports $6\frac{1}{2}$ millions. The staple exports in 1885 were cotton (1 million), sugar (£800,000,—average, 1880 to 1884, $1\frac{1}{2}$ millions yearly), caoutchouc ($1\frac{1}{2}$ millions,—average $1\frac{1}{2}$ millions), coffee (half a million,—average £700,000). The imports were cotton goods ($2\frac{1}{2}$ millions,—average for 1880 to 1884, $3\frac{1}{2}$ millions), iron (half a million), linen (£100,000), woollens (£300,000), coals (a quarter of a million), and machinery (nearly half a million).

81. From this survey, we trace that from 1872 to 1885 the population *increased* nearly thirty per cent., but general trade *languished*, both the imports and exports *falling* in value; the former nearly 2·5 per cent., and the latter 5 per cent. British trade also suffered, the exports from Brazil falling about 27 per cent., but the imports just about held their own, and consequently our *pro rata* proportion was more equalised. In the period 1870 to 1874 we held just about one-third of the exports and the imports; in the following period our average was not so good,—about one-quarter of the exports and one-third of the imports.

Although the tendency of the staples has been to flag, there is no indication of a general decline; and with the increased railway communication now promoted, Brazil should take a lead among nations for purchasing powers;—at present fiscal difficulties prevent reciprocal interchange. It is not too much to say that Brazil forms one of the finest fields in the world for enterprise, and that she is one of the best unopened markets.

82. Uruguay had in 1873 a population of barely half a million, equivalent to six to the square mile.

From 1870 to 1874 the total imports averaged $3\frac{1}{2}$ millions a year, of which England supplied $1\frac{3}{10}$ millions; the exports were valued at 3 millions, Great Britain taking $1\frac{1}{4}$ millions. The staple exports to us in 1874 were hides (three-quarters of a million) and tallow (a quarter of a million); the imports were cotton goods and iron, both valued at a quarter of a million.

In 1884 the population had risen to nearly 600,000, making the density eight to the square mile.

From 1881 to 1885 the total imports averaged $4\frac{1}{4}$ millions annually, Great Britain sending nearly $1\frac{1}{2}$ millions; the exports averaged $4\frac{7}{10}$, England only receiving five-eighths of a million. The figures are calculated at four shillings to the peso. The staple exports in 1885 were hides (£200,000), tallow (£190,000), preserved meats (£26,000), skins (£30,000), bones (£37,000), and wool (£28,000); while the imports were cotton goods (£400,000), woollens (£190,000), coal (£140,000), iron (£290,000), and machinery (£50,000).

83. From this history of trade, we deduce that from 1873 to 1884 the population rose 33 per cent. Total imports increased 25 per cent., and the exports a trifle over 50 per cent. British trade fell away just 50 per cent. on exports from Uruguay, and increased 10 per cent on imports. In 1870-74 period we held about 30 per cent. of the imports, and supplied about 40 per cent. of the imports; while in 1881-85 we only held about 13 per cent. exports, and just over 33 per cent. imports.

The staple export of hides fell largely, nearly 75 per cent., and tallow over 20 per cent.; these losses are somewhat rectified by additional exports of preserved meats, wool, &c. Our imports of cotton goods increased over 33 per cent., and although iron was quiet, woollens, machinery and coal increased. A large trade in wine is opening out with Spain. Uruguay has long been considered one of England's best customers; we must try to keep her and supply all her requirements. There is no doubt there is ample scope here for more English energy.

84. La Plata had, in 1869, a population of $1\frac{3}{4}$ millions. From 1870 to 1874 the total imports averaged $10\frac{3}{10}$ millions a year, England contributing $3\frac{1}{2}$ millions; the exports averaged 8 millions, Great Britain receiving $1\frac{1}{8}$. The staple exports in 1874 were skins and tallow (both valued approximately at £400,000), and hides (£150,000); while the imports were cotton goods (three-quarters of a million), woollens (a quarter of a million), and iron (seven-eighths of a million).

In 1882 the population had risen to just over 3 millions; the recognised area was twice as large as it was in 1869, therefore the density per square mile was unaltered.

From 1881 to 1885 the total imports averaged $15\frac{1}{2}$ millions annually, England sending $4\frac{3}{4}$; the exports were $13\frac{1}{8}$, England receiving $1\frac{1}{8}$ millions. The transit-trade in 1885 was valued at £2,870,000, of which about £2,400,000 was with Bolivia.

The staple exports in 1885 were tallow (£170,000), mutton (£300,000, having risen from £10,000 in 1883), skins (£200,000), bones (£100,000), hides £140,000), and grain (a quarter of a million). The staple imports were cotton goods (1 million), woollens (£600,000), iron (1 million), and machinery (half a million). The total value of wheat, maize, and flax exported in 1885 was a trifle over 2 millions sterling.

85. Thus we see that from 1869 to 1882 the population of the Argentine Confederation *increased* 75 per cent., but owing to the enlarged recognised area, the density per square mile remained the same.

From 1870 to 1885 trade showed a very healthy tendency; total imports *rose* 50 per cent., and exports about 63 per cent. A very large transit-trade, especially in silver, is carried on with Bolivia. **British trade did not rise in the same proportion; for whereas in 1870-74 we held nearly 25 per cent. of the exports, and gave about 30 per cent. of the imports, in 1881-85 we only held about 9 per cent. and 30 per cent.**

All the staple exports *fell* considerably, but this deficiency is counterbalanced by the exportation of meat, which, from 1883, rapidly assumed large dimensions, rising in the three years 2800 per cent. on actual values.

Our imports of cotton *rose* about 25 per cent, while woollens more than doubled; and, in 1881-85, were supplemented by machinery.

One heavy drawback in the Argentine trade is the bad currency, the premium on gold for settlements having risen to 140 per cent., and more. The meaning of this is, that paper-

money had been issued beyond the mercantile confidence in the stability or responsibility of the Government; that gold payments for £100 became equivalent for 100×140 pounds paid in paper. For transactions there and then this gave little trouble, since gold could be exchanged for notes, or notes for gold, at once; but as the ratio between the two fluctuated from day to day, business that involved delay became quite speculative, ending in loss or profit according as the rate rose or fell. Still, La Plata has met all engagements; and looking at the energy put into railways, harbours, and the development of resources, we may confidently predict a vast increase of trade, eventually enrolling almost all Bolivian and west coast produce in its sum. *La Plata may be regarded as the Canada or United States of the south*, promising to be no mean competitor with the north in wheat production, aided by the tide of immigration and the rapid advancement of the railway system.

86. The "**west coast trade**" is the designation given to the commercial movements on the Pacific shores of South America. The area may be roughly estimated at 2,000,000 square miles.

87. The **mineral wealth** of this region is very great; its stores of nitrate and guano have gained for the ports of this coast the descriptive title of "**the nitrate ports.**"

The resources include antimony, arsenic, alum, asphalt, borate of soda, copper, coal, cubic nitre, emeralds, gold, guano, iron, iodine, lead, manganese, mercury, nitrate of soda, nitre, obsidian, platinum, regulus, quicksilver, salt, silver, saltpetre, sulphur, sulphate of soda and of lime, tin, and zinc.

88. Coal lies chiefly along the coast and on the islands towards the south.

Copper principally from Chili.

Guano from the sea-coast and islands.

Iron in most districts, but more especially towards the south.

Nitrate throughout Peru.

Silver and gold favour the central districts chiefly; the famous mines of Potosi lie in Bolivia.

The mineral resources are in the region between the pampas and a coast-strip some eighteen to twenty miles broad.

89. All cereals thrive well. Among other produce from the vegetable kingdom are obtained balsams, barley, beans, cinchona, coca, cotton, cascarilla-bark, cinnamon, cacao, corozonuts, copaiba, cloves, dragon's blood, drugs, fruits,—both temperate and tropical,—guava, hemp, hops, indigo, india-rubber, lentils, marjoram, maize, oats, orchilla, olive, Peruvian or Jesuit's bark, pastures with their products of Alpaca wool, &c., pepper, potatoes, rice, spices, sugar, timber, tobacco, vegetable ivory, wheat, &c.

90. Forests are chiefly confined to the south.

Maize, barley, and oats are grown in succeeding stages from north to south; wheat and barley largely in Chili. By choice of position wheat will ripen at any time of the year; Ecuador is specially favoured in this respect.

The agricultural as well as the mineral resources of this large area seem inexhaustible, but are not generously worked.

91. Local trade movements are chiefly coastwise by the railway lines and roads. From the eastern side of this area communication is opened to the east coast at Buenos Ayres or other river-ports of La Plata, and through-railway connection is contemplated.

By ocean-routes, the choice lies between rounding the Horn or proceeding to Panama or San Francisco and transshipping. The opening of the canal will give this trade a great impetus; the trans-continental line, too, will draw away much merchandise to "the Plate" for shipment, thus avoiding the Horn on the one hand, transshipment or canal dues on the other.

There is communication also between Valparaiso and other ports and Fiji and Australasia.

92. Trade statistics show that in 1875 the population of Chili was just over 2 millions, or sixteen to the square mile. In 1873 and 1874 the total imports averaged $7\frac{1}{2}$ millions a year, and the exports $7\frac{1}{2}$ millions; from 1870 to 1874 the exports to Great Britain averaged $4\frac{1}{2}$ millions annually, and the

imports $2\frac{1}{2}$ millions. The **staple exports** in 1874 were copper ($2\frac{1}{2}$ millions), wheat ($1\frac{1}{8}$ millions), wool (£160,000), and silver (a quarter of a million). The **imports from us** were cotton goods (2 millions), woollens (a quarter of a million), iron (close upon half a million), and hardware (£130,000).

In 1885 the **population** had risen to $2\frac{1}{2}$ millions. The **total imports** (1884 to 1885) averaged yearly $9\frac{1}{2}$ millions, and the **exports** 11 millions, calculated at four shillings to the dollar. The average value of nitre exported during these years was 5 and copper $2\frac{1}{4}$ millions, and silver 1 million.

From 1881 to 1885 the **exports to Great Britain** averaged 3 millions a year, and the **imports from us** $2\frac{1}{2}$ millions. The **staple exports** were, in 1885, copper ($1\frac{1}{4}$ millions), wheat and barley (£700,000), sugar (£100,000), chemical products (£60,000), cotton (£50,000), nitre (£90,000), and wool (nearly £60,000); the **imports** were, cotton goods (£450,000), woollens (£200,000), iron (a quarter of a million), and hardware (£70,000).

93. This view of the **trade history of Chili** enables us to deduce that from 1875 to 1885 the population *increased* about one-fourth. The total imports *rose* just over 22 per cent., and the exports nearly 50 per cent. *In the 1870 to 1874 period Great Britain held about 60 per cent. of the exports and 35 per cent. of the imports; but in the next period, 1881 to 1885, we fell away, holding barely 30 per cent. and 24 per cent. respectively.*

Copper, as a staple, *fell* over 50 per cent., cereals nearly 50 per cent., and wool more than 50 per cent.; the distance from our markets adversely affected these exports, looking at the fields opening and opened nearer home.

Our sales to Chili also *fell* largely, cotton goods declining over 75 per cent., woollens 25 per cent., iron and hardware 50 per cent.; nor do these goods seem supplemented by others. Nitre, which represents fully 50 per cent. of the total trade, is hardly represented in English commerce.

Education, more advanced than in any other South American country, has shown good fruits by increasing intelligent trade.

With its advancing manufactures, its railways and fine ports, it is not unreasonable to predict a great future for Chilian commerce.

94. The population of Peru in 1862 was given as nearly $3\frac{1}{2}$ millions. From 1870 to 1874 the total imports averaged 5 millions a year, of which Great Britain supplied $2\frac{1}{2}$ millions; the exports averaged $6\frac{1}{2}$ millions, of which we took $4\frac{1}{2}$. The staple exports to England in 1874 were guano ($1\frac{1}{2}$ millions,—the average from 1869 to 1873 being 2 millions yearly), nitre ($1\frac{1}{8}$ millions), wool (just over half a million), and sugar (a like amount). The imports were cotton goods (£400,000), woollens (£200,000), iron (£300,000), and coal (£120,000). In 1885 the population was undefined since the war. From 1880 to 1884 the total imports averaged $2\frac{1}{2}$ and the exports $1\frac{3}{4}$ millions annually; England supplying £800,000 of the former, and taking, according to the returns, all, and more, of the exports. The figures given for 1885 are $1\frac{7}{8}$ millions sent to us, and nearly three-quarters of a million taken from us.

The staple exports in 1885 were guano (*nil*,—the average from 1876 to 1879 having been $1\frac{1}{3}$ millions, and from 1880 to 1884, £320,000), nitre (something just short of a million), sugar (half a million), wool (a quarter of a million), cotton (£120,000), and copper (less than £10,000). The imports from us were cotton goods (a quarter of a million), and woollens (£150,000).

95. Reviewing :—The population of Peru cannot be reckoned since the war with Chili, and trade was so demoralised that it is hardly fair to compare the two periods; the loss of guano being such an important element in this export trade.

The imports really *fell* over 50 per cent., and the exports 75 per cent., and in both periods Great Britain had the major part of the trade. The returns are so meagre that inaccuracies occur; for instance, in 1881–85 English trade appears larger than the whole.

With regard to exports, nitre declined 25 per cent., and other commodities similarly; while our imports of cottons, &c., fell away nearly 50 per cent.

The paralysis of trade has not yet passed away; and many years must elapse before Peru recovers a status among commercial countries.

96. The returns from Bolivia give the population in 1861 as $1\frac{3}{4}$ millions, or four to the square mile.

From 1870 to 1874 the total imports averaged just over 1 million and the exports exactly 1 million a year. Bolivia drew from Great Britain at this time only some £40,000, and sent out exports valued at half a million,—this was direct trade. The staple exports in 1874 were copper (£100,000), nitre (£120,000), and silver (£100,000); the imports were cotton and woollen goods, each valued below £20,000.

In 1880 the population was about $2\frac{3}{10}$ millions. From 1880 to 1884 the total imports averaged annually $1\frac{1}{2}$ millions, and the exports $1\frac{1}{2}$ millions. In 1883 the exports *via* Buenos Ayres reached $3\frac{1}{2}$ millions, nearly all silver; in 1885 the sum was 2 millions, all but one-tenth being silver. The imports by the same route for 1885 were £340,000, of which rather more than half were textiles.

From 1881 to 1885 Great Britain sent only £76,000 a year, and received £300,000 direct. The staple exports in 1885 were copper (£70,000) and nitre (£130,000); the imports were cotton goods, iron, machinery, apparel, and haberdashery, all of very low value.

97. Thus we see that from 1861–1880 the population *increased* about 33 per cent. Trade did not show much life; the principal movements were *via* La Plata. Our direct trade *increased* very fairly, and in better proportion than the total trade. The exports to Great Britain, however, *decreased* over 33 per cent., but the imports *rose* 100 per cent.; for, although direct cotton goods fell considerably, iron and machinery restored the balance. Bolivia has now no sea-board; but with such valuable mineral resources and so rich a soil, a great commerce should be carried on, which will be very materially assisted by the trans-continental line.

98. Ecuador in 1870 had a population of $1\frac{3}{10}$ millions, or six

to the square mile. From 1873 to 1874 the total imports averaged £200,000 a year, and the exports twice as much. From 1870 to 1874 the exports to Great Britain averaged a quarter of a million and the imports £75,000 annually. The staple exports in 1874 were cocoa (£175,000), Peruvian bark (£50,000), and caoutchouc (£30,000); the imports were cotton goods, valued at less than £25,000.

In 1885 the population had decreased to a million, or four to the square mile; but the total imports from 1881 to 1885 had risen to $1\frac{1}{2}$ millions a year, of which Great Britain supplied nearly a quarter of a million; and the exports, 1 million, of which we took one-fourth. The staple exports in 1885 were Peruvian bark (£30,000) and cocoa (£100,000); while the imports were cotton goods, valued at £270,000.

99. We therefore deduce these facts, that from 1870-1885 the population fell nearly 25 per cent., but trade increased. Total imports rose in a most extraordinary manner, about 450 per cent., and exports, 150 per cent. This means a very remarkable rise; but, unfortunately, *England, although rising too, did not keep pace to such an extent, more especially in exports, although in imports we did well.*

In 1870-74 period we held about 60 per cent. of the exports, and rather more than 33 per cent. imports. To preserve the same ratio in 1881-85, we should have held £600,000 exports and £330,000 imports, or thereabouts. The real figures were £230,000 and £235,000; showing that our goods still suited the markets and shared in the rise; but, on the other hand, we did not buy so much of Ecuador as did other nations. The most remarkable feature was the importation of manufactured cottons, which increased twelvefold.

The climate and soil of Ecuador are so good that there is a great opening for trade. Wheat will ripen at any time of the year. Ecuador offers to commerce a fine field, hardly yet touched.

SEPARATE CHART).

INDUSTRIES.			
...
round, cork, pickor, case, ia. — after, in fashions lob- sugar, adilla, ava, yarrow, adopea	Ironworks and castings, glass-work, pottery, soap, mineral oils purified.	Timber trade, fruit-nurseries, ship-building, potash, pearl-ash, flour, cotton fabrics.	Meat prepar- ing and tin- ning (Chi- cago), fish- ing for pearls (Calif- ornia).
ot, mai- sugar-ci- po; van- , pine-a- tamaris- tapioc- emon, p- yinger- s, capsic- lasses, y- ice, mai- yenne, 1	Earthen and stoneware, gold and silver lace, glass, silver-smelting.	Paper, flour.	...
antain, b, maize, nilla, cit- le,	...	Panama hats, coquilla-nut (ivory).	...
pioca, bu- t fruits q-)—vanill	...	Cigars, tobacco (Havana), balsa cork, crab's-eyes.	Pearl-fishery.
ce, arrow- l-nut, ba- apple, ta- of South- , wheat, ost Euro-
oats; Ev- in Chili. and birds	Pottery (c).	Coquilla-nut, Panama hats, balsa.	Pearl-fishery.
D AND SE-
	Cutting of dia- monds and precious stones.	Corozo and co- quilla nuts (vegetable ivory of turners).	Jerked beef, meat-tinning (south).
	Meat-tinning, Liebig's meat extract.
	Earthenware jars, soap, copperware (a).	Hempen cloth, charcoal, flour (a).	Leather (a).
	MINERAL.	VEGETABLE.	ANIMAL.



Examination Questions on Mexico and South America.

1. Give a general description of the features, resources, and commercial advantages of the States of Central America, and explain why they remain in a backward condition of well-being.
2. What effect upon the economic advancement of these States and the West India Islands may be forecast from the completion of the Panama Canal?
3. Classify the republics of South America as Pacific, Atlantic, and inland States. Name the largest and most advanced on either ocean,—with their chief towns and ports.
4. State the particulars of the recent material progress of “the Plate” or Argentine Confederation.
5. Describe the waterways of the continent, their sources, courses, and commercial utility.
6. What is the general nature of South American commerce, in and out; and what part of it is the indigenous produce of the country? What are the staples of export, and what exports increase most rapidly in volume?

AUSTRALASIA.

AUSTRALIA, NEW ZEALAND, TASMANIA, AND FIJI.

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1. **Australia and New Zealand**, with the adjacent insular colonies, occupy an important geographical position in the southern hemisphere. Situate in the South Pacific Ocean, Australia spreads over thirty degrees of latitude by forty of

longitude, and though a British dependency, and not a self-contained State, commands a prominent place among commercial countries. From its continental magnitude, our possession is an island only in the sense that both the Old and the New Worlds are islands, being surrounded by water.

2. Australia is by direct sea-routes in communication with all parts of both hemispheres, having access north by the Indian Ocean, Torres Straits, and the Coral Sea to India, the East India Islands, China, and New Guinea; east and west by an undeflected course across the Pacific or the Indian and Atlantic Oceans to the opposite shores of America; and by three alternative paths, the Cape, the Horn, and the Suez Canal, to Europe.

3. Off the south-east coast, and separated by Bass Strait, lies the island of **Tasmania**, and farther across the South Pacific is **New Zealand**. This last colony is composed of three islands, of which "South Island" is the largest, "North Island" second, while "Stewart Island" is of little commercial importance. New Zealand ranges through ten degrees of longitude.

4. In the direct road to America, and about ten degrees east from Australia, are the **Caledonian Islands**, and double the distance in the same course, the **Fijis**, usually included in the Australasian trade-area.

5. Australia, a magnificent portion of our colonial empire, is divided into the settlements of **Queensland**, **New South Wales**, and **Victoria** on the east; **South Australia**, with which North Australia is now incorporated, occupying all the midland territory between the before-named colonies and the immense settlement of **Western Australia** on the side of the Indian Ocean.

6. The harbours, on the east and south especially, are excellent, being land-locked in gulfs or creeks, such as Melbourne and Port Phillip, Sydney and Port Jackson, than which there are no grander havens existing. These natural advantages have been added to by constructive works in harbour and dock accommodation, promoting mercantile advancement which the younger colonies wait as yet to achieve.

7. **The mineral resources** of Australia are superabundant. From the geological formation, Sir R. Murchison predicted the discovery of gold, since more than amply verified. Invaluable deposits of copper and other metals have greatly assisted in developing trade.

8. **The wealth of Australasia, nevertheless, consists in agricultural produce.** More bereft of useful animals at first than any other division of the globe, the pastures now feed countless flocks of sheep, which have created a wide and fast-increasing trade in tinned and frozen meat, and made these colonies the wool-purveyors of the world. East Australia is the most mountainous, and the south-east, where gold was first met with, has the largest population.

9. **North Australia,** placed within the tropics, is not much sought, and lies unworked. Bounteous in mineral wealth, and yielding varied agricultural produce, it barely enters the arena of commerce. No difficulties of approach prevent the establishment of ports, which must eventually arise.

10. **Queensland,** where it joins the North Australian territory, is a stony waste; but on the east, stretching from the sea far inland, are boundless plains of pastures, lofty hills, and fertile valleys, alternate levels and ridges clothed with grass or timber, or extensive plains of luxuriant herbage. A range of mountains runs parallel with the sea-coast, and sends out spurs towards the shore; while beyond the mountains extend the "downs." **The soil is fertile,** especially along the rivers, where the banks are covered with a rich alluvial deposit. These rivers are nowhere of much commercial use, but for irrigation purposes they are invaluable.

11. **New South Wales** is mountainous or hilly, and presents a diversified surface of hill, plain, and valley. A continuation of the Queensland hills runs parallel with the coast. In the centre extend the Blue Mountains, and beyond these the downs and pastures sloping gently westward; while, in the south, the Australian Alps, broken from the Blue Mountains by the river Murrumbidgee, extend into Victoria, and gradually

approach the shore. The coast is bold and rocky, with good harbours. The soil is fertile and the climate healthy.

12. **Victoria** lies in the south-east corner of Australia, and from the borders of New South Wales to Wilson Point has a low, unbroken coast; from thence to Discovery Bay it is bold and precipitous.

The interior is diversified by hills and plains, the latter often being of great extent and covered with excellent herbage.

Victoria has the Murray, the chief river of Australia, as a frontier, dividing the colony from New South Wales.

13. In **South Australia** the land by the shore is generally low, but the numerous gulfs and bays provide excellent *natural harbours*; but even here, in general, vessels have to lie off-shore to load.

A large portion of the northern part appears to be a barren waste; but south of the mountains, and among the hills that fringe the colony, stretch out those pasturage plains covered with sheep, and the corn-fields and vineyards, which add so much to the material wealth of South Australia. The soil is generally good and the climate healthy.

14. **West Australia** is, like the other colonies, fringed near the sea by high lands, beyond which spread the broad rolling plains of pasture. The coast is rendered somewhat difficult of approach by reason of the coral-reefs; the shore is generally elevated and well wooded.

The chief features are the green downs, the hills and valleys covered with forests of sandalwood and other trees. In all the drier parts of Australia artificial irrigation is now adopted.

15. **Tasmania** is very diversified, and decidedly mountainous in the centre, whence the ranges send out spurs to each corner of the island. There are many pasturage plains and fertile valleys.

The coast is bold in the south and east, and affords excellent *natural harbours*. The mountain streams are many, and the north, west, and south each appear to have one good river, navigable for some little distance inland, namely, the **Tamar**,

Macquarie or **Gordon**, and the **Derwent**; these, especially the last, almost take the position of commercial rivers.

16. The **New Zealand islands**, eleven hundred miles distant from **Australia**, are traversed by a chain of lofty mountains, skirting the south-east coast of the northern island and the west coast of the southern. These mountains are intersected by beautiful valleys opening out to the sea and watered by good streams and rivers. The ranges are for the most part clothed with grand forests; and the diversified surface of the islands generally is covered with pastures and corn-fields.

The coast of the North Island is fringed with sand-belts, within which extend low, flat lands, in the winter season a swamp, but in the summer covered with vegetation. These alluvial deposits are of great extent, and contain often the best and most valuable land in the colonies, only requiring to be drained. The coasts of the southern part of the North Island and all South Island are rocky and bold, and *afford excellent harbours*.

17. These colonies, like all new lands, attracted emigrants, who naturally at first settled near the coast; hence we find the great centres in the seaport towns placed in the best and most commodious harbours of each colony. As mining experiments were tried, these drew off some of the colonists to the mineral districts; and towns, drawing their supplies from the seaports, sprang up; such as **Ballarat**, the gold-centre of **Victoria**; **Bathurst**, in **New South Wales**; **Newcastle**, the coal-centre of **New South Wales**; or **Wallaroo** and **Moonta**, the copper-centres of **South Australia**.

18. The great attraction of all these colonies is agriculture. Settlers penetrate farther into the interior and the bush; and as they become established their wants increase, both personally and commercially. Railways are then projected, and the most advanced colonies join one to the other, and seaport to seaport and inland town, by the iron road.

19. **New South Wales** and **Victoria**, which are the oldest, are also the most numerously settled and prosperous colonies.

They were sought for their valuable resources; here the "gold-fever" broke out, which brought a flood of immigrant adventurers, who, after a time, quietly settled down as productive citizens, adding greatly to the progress and population of the colonies. **South Australia and Queensland** were then colonised. **Western Australia** is still backward, and **North Australia** is a possession, but hardly yet a settlement.

20. **New Zealand and Tasmania** have a history of equal duration with the oldest of the Australian colonies, with whose prosperity they successfully vie.

21. **Queensland** is so rapidly advancing, though only recently settled, as to claim its own local legislature. As yet, the cultivated lands do not reach far beyond the sea-board, but the sheep-runs extend indefinitely into the interior over the "Darling Downs."

22. The colonies are exporters of raw materials and natural products, having few or no manufactures; finished and manufactured goods being imported in return.

23. The gravitation of goods in **North Australia** is at present undefined; the streams are small, and there is no call for inland distribution.

24. **Queensland** produce all comes to the sea-board, conveyed by cart or bullock-track, except where the rail penetrates, although the western borders have a *natural route* by the river Darling. This highway, however, would necessitate a very long passage to the sea in *South Australia*; hence all goods circulate to and from the eastern sea-coast, where the *chief distributing centres* are **Brisbane, Gladstone, Rockhampton, Port Denison, &c.**; these seaports distributing to the contiguous inland circles. As the coasts become more thickly populated, new ports arise; but, inland, there are no centres or emporiums of consequence.

25. **New South Wales** has its *great centre* in **Sydney**, followed by **Newcastle** as an export mineral centre; **Victoria** has its *great emporium* in **Melbourne**, and **South Australia** in

Adelaide. All, too, have minor ports, which are supplied from the great centres by coasting vessels.

26. West Australia and Tasmania have their centres in **Perth and Hobart Town**; while **New Zealand** is studded with harbours. The greatest business centres, in the latter of which **Dunedin** stands foremost, are on the east coast, because the range of mountains stands farther back from the shore on this coast than on the west, thus allowing more extended activity.

27. As Australasia imports most of its manufactures, one central port in each colony is necessary to receive and store the cargoes, which are then drafted out to the inner circles as required by road, sea, or rail, in accordance with the more or less advanced state of the colony. For receipt of the upland produce, vessels call at the smaller ports. Thus the centres stand as export and import emporiums and great distributing entrepôts; while the minor ports are export only as far as over-sea is concerned, but import coastwise.

28. Australasia includes, under the title of "**Colonial trade**," West Australia, North Australia, Queensland, New South Wales, Victoria, South Australia, Tasmania, Fiji, and New Zealand.

This area embraces the *temperate, warm temperate, sub-tropical, and tropical zones*.

The total area, excluding North Australia, is 3,084,568 square miles.

29. Mineral produce consists of antimony, alum, asbestos, bismuth, copper, coal, cinnabar, diamonds, gold, galena, granite, greenstone, glass sand, iron, kerosene shale (lead), limestone, marble, manganese, nickel, opals, petroleum, porphyry, potter's clay, plumbago, quicksilver, ruby, silver, syenite, slate, sandstone, sulphur, titanium, tin, and zinc.

30. Copper is a specialty of South Australia;

Coal of New South Wales; and

Gold of New South Wales and Victoria.

A vast mineral opening in all directions still exists in these colonies.

31. North Australia is supposed to have as much mineral

wealth as any part of Australasia, but it is undeveloped ; here indeed lies a promising market yet to be opened.

32. South Australia yields argentiferous lead, copper, clay, gold, granite, greenstone, iron, manganese, marble, porphyry, syenite, quicksilver, slate, zinc, &c.

33. West Australia gives antimony, coal, copper, cinnabar, gold, iron, lead, plumbago, and tin ; but the resources of this colony are really not known yet.

34. New South Wales has antimony, asbestos, bismuth, coal, copper, cinnabar, gold, iron, lead, limestone, petroleum, precious stones, and silver.

35. Queensland produces antimony, coal, gold, galena (lead), quicksilver, &c.

36. Victoria yields antimony, clay, copper, coal, gold, granite, &c.

37. Tasmania has basalt, copper, coal, freestone, gold, granite, lead, iron, limestone, manganese, slate, sandstone, silver, tin, zinc, &c.

38. New Zealand produces alum, antimony, arsenic, bismuth, coal, copper, gold, iron, nickel, silver, sulphur, tin, &c.

39. Fiji has no economic minerals.

40. Pasturage for sheep and cattle is the staple of all the colonies, yielding the commercial products of wool,—some merino, —hides, skins, leather, horns, tallow, meats, and carcasses.

Other products consist of apples, arrowroot, bark, barley, cotton, coffee, eucalyptus, flax, fruits, forest-trees, gums, honey, hops, indigo, jute, kauri gum, maize, mulberry, muskwood, myrtle, orange, olive, olive-oil, oats, potatoes, quince, rice, resin, silk, sandalwood, shipbuilding wood, sugar, sago, tapioca, tobacco, tea, and wheat.

41. North Australia, as yet but little known, is not much, if at all, cultivated.

42. South Australia, beyond its wool, &c., has a specialty in wheat and flour. The vine does well, and winemaking is likely to succeed, as also is the mulberry-culture for silk. Area 903,425 square miles, or 578,272,000 acres, of which 2,785,490

only were under cultivation in 1885, and of these 1,942,453 were devoted to wheat.

43. **West Australia** has a specialty in sandalwood. In 1879, 20,000,000 acres of well-watered land, intersected by the Fitzroy and other rivers, were found to be well suited for the growth of coffee, rice, and sugar. The fertile land, as yet, is only here and there in patches, but yields barley, flowers, fruits, hay, jarrah, potatoes, the vine, wheat, &c. The area is 975,920 square miles. In 1885 only 77,728 acres out of 678,399,886 were cultivated, and of these 29,511 were wheat-sown.

44. **New South Wales** has no specialty. Silk-culture may be successfully carried on ; oranges, maize, and the vine thrive ; wine is likely to develop into a large industry ; cotton and tea, it is said, may be profitably cultivated ; wheat, maize, and sugar are extensively grown. The area is 310,700 square miles ; of these 217,407 were leased in 1885 for agriculture. The total holdings were 38,582,723 acres, of which only 868,093 were cultivated.

45. **Queensland** makes a specialty of her fruits, of which oranges and bananas may be called the staples. Cotton, jute, and other fibre-plants promise well. The area is 668,497 square miles, the acreage for agricultural purposes being 307,290,880, of which only 209,130 were under cultivation in 1885. About one-half the colony is yet forest. Maize is the "grain" of Queensland.

46. **Victoria** has specialties,—potatoes, malting barley, and merino wool. Hops, fruits, oats, hay, tobacco, vines, and wheat thrive. The area is 87,884 square miles. About 8,500,000 acres were suitable for agricultural pursuits in 1886 ; of these only 2,405,157 were cultivated,—half wheat,—in 1886.

47. **Tasmania** makes a specialty of hops, fruits, barley, oats, and wheat, while all Australian produce does well. The area is 26,375 square miles. Only 417,777 acres were under cultivation in 1885.

48. **New Zealand** specialties are flax and kauri gum, while cereals, forests of great growth, and the usual Australian

produce thrive. The area is 104,027 square miles. 6,668,920 acres were under cultivation in 1886; of these 537,982 were under cereals, and 5,465,157 under grass.

49. **Fiji** makes a specialty of tropical fruits and produce, and yields arrowroot, cocoa, cinchona, coffee, cotton, copra, banana, fruits, oil-nuts, maize, mulberry, sugar, tobacco, and tea. The area is 7740 square miles.

50. **Local Trade Movements.**—Merchandise is transported to other countries solely by sea; and from colony to colony chiefly by sea, coastwise. Railways are now spreading inland as the settlers progress; there is also an intercolonial line. New Zealand has a coast railway, available from port to port.

Taking the colonies as a whole, transport facilities are fair. Round the towns, mining centres, and ports they are almost all that can be wished, but in the more scattered parts the settlers have to "haul" their produce to the nearest terminus, but as requirements increase the railway follows.

From all the more important ports fleets of "regular liners" sail for Great Britain, the continent of Europe, China, India, San Francisco, and other parts of the world.

51. In comparing the trade of Australasia, we must consider the progress of each colony, and then draw our conclusions on the whole.

South Australia.—In 1871 the population was a little over 185½ thousands. From 1870 to 1874 the total imports averaged 3 millions a year. Of these Great Britain supplied 1½ millions. The exports averaged 3½ millions, 2½ going to England. From 1881 to 1885 the total imports averaged 6 millions annually, and the exports 5½ millions; Great Britain being interested in these to the extent of 2½ and 3 millions respectively.

We thus see that from 1870 to 1885 total trade increased 75 per cent., and British trade 50 per cent. in the same period. *In the first period we held half the imports and about 60 per cent. of the exports; but in 1881 to 1885 period we only held 42 per cent. of the imports and 55 per cent. of the exports.*

The wool export in 1874 was valued at nearly $1\frac{1}{2}$ millions, and in 1885, at just over a million and a half. From 1874 to 1883 the number of sheep increased 1 per cent., horses 75 per cent., and cattle 100 per cent. It is said that wheat averages eight bushels to the acre.

52. West Australia in 1870 had a population just under 25,000. From 1870 to 1874 the total imports averaged a quarter of a million yearly, of which we supplied £140,000; the exports averaged £300,000,—£140,000 going to England. British imports therefore equalled just over 50 per cent. of the total imports and 45 per cent. of the exports.

From 1881 to 1885 the total imports averaged a trifle over and the exports just under half a million a year; Great Britain sharing in the former to the extent of £220,000, and in the latter, £260,000. We therefore held about 42 per cent. of imports and 55 per cent. exports; general or total trade having increased 75 per cent.

In 1885 the population was just over 35,000, an increase of about 42 per cent.

53. New South Wales in 1871 had a population of half a million. From 1870 to 1874 the total imports averaged just upon $9\frac{1}{2}$ millions yearly, Great Britain sending $3\frac{1}{2}$ millions; the exports averaged 10 millions, $3\frac{3}{4}$ going to England. British commerce therefore equalled 37 per cent. of both imports and exports.

In 1885 the population was just under a million, or a rise of 88 per cent.

From 1881 to 1885 the total imports averaged $21\frac{1}{2}$ and exports $17\frac{1}{2}$ millions a year; British contribution being $8\frac{1}{2}$ and 8 millions respectively. We therefore held 39 per cent. of the imports and 46 per cent. of the exports; total trade having risen 100 per cent.

Wool export has increased in value from $2\frac{1}{2}$ millions in 1870 to 5 millions in 1885. From 1872 to 1885 the number of sheep increased 520 per cent., cattle decreased 50 per cent., horses rose 40 per cent., and pigs 45 per cent.

54. Queensland in 1871 had a population given at just under an eighth of a million.

From 1870 to 1874, the **total imports** averaged 2 millions annually, **England** contributing three-fifths of a million; the **exports** averaged $2\frac{1}{2}$ millions, **Great Britain** taking three-quarters of a million. British trade was therefore something under a third both for imports and exports;—say 30 per cent. on both.

In 1885 the **population** had risen to 300,000, an increase of 180 per cent. From 1881 to 1885 the **total imports** averaged 6 millions a year, and the **exports** $4\frac{1}{2}$ millions; **English** trade gave a contribution of 2 millions to the **imports**, and received $1\frac{1}{2}$ millions of the **exports**. We therefore held one-third of the total trade, or barely the same proportion as in 1870–1874; total trade having increased 125 per cent.

Wool export in 1870 was valued at close upon £600,000, and in 1885 at £1,385,000, or more than a cent. per cent. rise.

The cultivation of cotton declined from 9663 acres in 1873 to only 50 acres in 1885, yielding 15,000 lbs. of cotton; sugar rose from 14,500 acres to 60,000 acres, yielding one ton per acre. From 1873 to 1883 sheep rose in number 20 per cent., cattle 210 per cent., horses 160 per cent., and pigs 25 per cent., or thereabouts.

55. Victoria in 1871 had a population of nearly three-quarters of a million.

From 1870 to 1874 the **total imports** averaged annually nearly $14\frac{1}{2}$ millions, **England** sending $5\frac{3}{5}$; and **exports** $14\frac{3}{10}$, **Great Britain** receiving 6 millions. We therefore held nearly 40 per cent. of the total imports and 42 per cent. of the exports.

In 1885 the **population** had risen to 1 million, or about 45 per cent. increase.

From 1881 to 1885 the **total imports** averaged 18 millions and **exports** 16 millions a year; **Great Britain** supplied $6\frac{3}{5}$ to the imports, and received $7\frac{2}{5}$ millions of the exports. We therefore held about 37 per cent. of the imports and 46 per cent. of the exports, total trade having risen 20 per cent.

Wool increased from $4\frac{3}{4}$ millions sterling and $64\frac{1}{2}$ million lbs. weight in 1870 to $83\frac{1}{2}$ million lbs. weight in 1885, but only valued at 4 millions sterling. Wheat, it is said, averages 9 bushels, oats 22, barley $17\frac{1}{2}$, potatoes 4 tons, and hay 1 ton to the acre.

56. **Tasmania** in 1870 had a population of about one hundred thousand. From 1870 to 1874 the total imports averaged 1 million yearly, **England** supplying one-fourth; while the exports averaged £825,000, one-half going to **Great Britain**. We therefore held, as nearly as possible, one-quarter of the imports and one-half the exports.

In 1885 the population had risen to 134,000, an increase of 30 per cent. From 1881 to 1885 the total imports averaged $1\frac{7}{10}$ millions and exports $1\frac{1}{2}$ millions annually; during this term the imports from **Great Britain** averaged just below half a million a year, and the exports were £400,000; we therefore held about 28 per cent. of the imports and just over a quarter of the exports, total trade having risen 88 per cent.

57. In 1871 **New Zealand** had a population just exceeding a quarter of a million. From 1870 to 1874 the total imports averaged $5\frac{5}{8}$ millions a year, **Great Britain** supplying $2\frac{3}{8}$; and exports averaging $5\frac{1}{8}$ millions, $2\frac{1}{8}$ going to **England**. We therefore held just upon half of both imports and exports; or say nearly 50 per cent. of the total trade.

In 1885 the population had increased to half a million, a rise of about 106 per cent. From 1881 to 1885 the total imports averaged $7\frac{1}{2}$ and exports $6\frac{3}{4}$ millions annually; the **United Kingdom's** share being 4 and $5\frac{1}{8}$ millions respectively. We therefore held half the imports and 80 per cent. of the exports, total trade having risen one-third.

Wool export in 1870 was $30\frac{3}{4}$ million lbs. weight, valued at $1\frac{3}{4}$ millions sterling; in 1885, just over $78\frac{1}{2}$ million lbs., valued at $3\frac{1}{4}$ millions. From 1874 to 1885 the number of sheep increased nearly 50 per cent., cattle 80 per cent., horses 90 per cent., and pigs 125 per cent., or thereabouts. Wheat averages $24\frac{1}{2}$ bushels, oats $26\frac{1}{10}$, and barley 26 bushels to the acre.

58. Reviewing the total trade and commercial movements

of the Australian colonies, we see that trade shows a wondrous rise from 1871 to 1885.

59. The population of **South Australia** increased 50 per cent.; total trade 75 per cent., and **British** trade 50 per cent. Wool slightly *decreased* in value, but this is a question of price, not quantity. The increase in live stock was also considerable.

60. **West Australian** population *increased* about 42 per cent.; total trade 75 per cent., and **English** trade 74 per cent.

61. **New South Wales** population *increased* 88 per cent.; total trade 100 per cent., and **English** trade 125 per cent.; Wool export increased in *value* nearly cent. per cent. The *increase* in live stock was also very considerable, especially in sheep.

62. **Queensland's** population *rose* 180 per cent.; total trade 125 per cent., and **British** 150 per cent. Wool export *increased* in value more than 100 per cent. Live stock also *rose*, especially horses and cattle.

63. **Victoria's** population *rose* 45 per cent.; total trade 20 per cent., and our share of the same 20 per cent. Wool *increased* in weight about 30 per cent., but the *value declined*.

64. The population of **Tasmania** *rose* 30 per cent.; total trade 88 per cent., and **British** 35 per cent.

65. The population of **New Zealand** *increased* 106 per cent.; total trade 33 per cent., and our share 72 per cent.; while wool export *rose* 150 per cent. in weight and 80 per cent. in value.

66. **North Australia** is not yet opened to commerce, so no comparisons can be given, but, judging from the other colonies, a great future lies before this district.

67. **Fiji**, too, can only be classed as a fruitful spot, but affording no comparison of trade.

68. Emigration has largely assisted the development of our colonies, the greatest rise having been in Queensland, where an immense future is opening out. The rise in total "turnovers" is marvellous, but the most satisfactory point is, that throughout these rises we have kept pace with them; taking the whole of the colonies, we have risen with them in equal proportion, plus 1.428 per cent.

69. The figures and accounts of each separate colony speak for themselves, and one can only say that the **Australian colonies are jewels in any nation's heritage, and set a good example to other colonies and dependencies.**

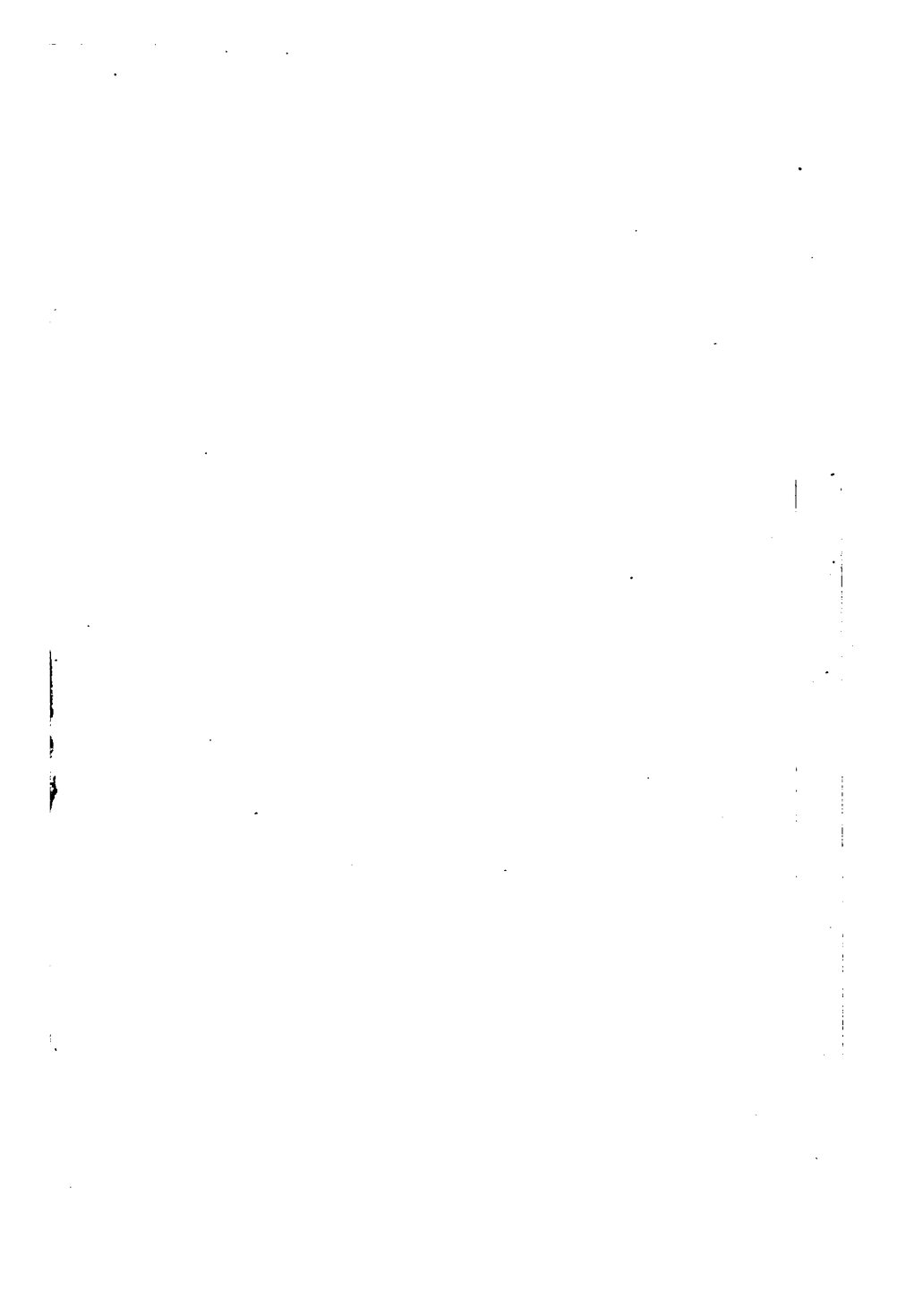
To knit our colonies in ever-closer connection with us and make our interests common should be the aim of the mother-country.

As will be readily seen, the resources of Australasia, running through so many and so varied climates, combined with mineral wealth, render the future of the colonies not only assured, but of such vital importance to the mother-country, that every effort must be made to keep up a healthy and reciprocal trade, supply their wants and their caprices, and reap reward ourselves from their resources.

70. The average increase for all Australasia in population has been 77·28 per cent., in total trade 73·71 per cent., and British trade 75·14 per cent.; in other words, we have fully held our own with the general rise. These returns prove conclusively the bond of commercial union between the colonies and the mother-country, and is an indisputable illustration of how "trade follows the flag."

Examination Questions on Australasia.

1. Describe the Australian settlements in reference to their economic progress, and their chief ports.
2. Where are situated the earliest Australian goldfields? Where the principal copper-mines? What are the staple exports, and whence derived?
3. Trace the routes by which Australia is approached from England, and name the ports of call on each route.
4. Contrast the economic condition of the settlements, when first colonised, with their present advancement.
5. Describe either Tasmania or New Zealand, and show wherein the industrial pursuits of the colonists resemble, and wherein they differ from those of Australia.
6. Explain the commercial movements of any of these colonies, and describe, generally, the course of trade between England and Australasia.



FULL POSSESSIONS.		COUNTRIES.	NATIVE MINERALS.	
	North America.	(a) N.W. Territory. (b) Manitoba. (c) Columbia.	Coal (a); coal, gold, iron, maver, copper, plumbago (c).	(silver, deer)
		(a) Hudson's Bay Territory. (b) Canada. (c) Labrador.	Iron, coal, copper, gypsum, plumbago, marble, petroleum, labradorite, basalt, silver, tin, serpentine-marble, baryte, graphite and green stones (baryte), manganese, lignitic and green stones (beum)	(squaccoon, az, and)
	Australasia.	(a) W. Australia. (b) S. Australia.	Copper, coal, lead (a, b); silver, bismuth (b).	pskin
		Queensland.	Gold, copper, coal, iron, tin, cury.	ool, f, chiefly ales, nberg, llow.
		(a) New S. Wales. (b) Victoria.	Gold, coal, copper, silver, lead, iron, mercury, salt (a); gold	
	Asia.	(a) Tasmania. (b) New Zealand.	Iron, copper, coal, tin (a); petroleum, copper, jade, silver, tin, iron, lignite, ganese (b).	Wool
		India and Ceylon.	Coal, saltpetre, topaz, beryl, amethyst, copper, soda (India salt (Punjaub),—gold (Mys —diamond, ruby, sapphire, eye, mercury, salt, graphite, tinum (Ceylon).	ants' ns of gavia, nt, sk, pe hers, lac a ergru
			Native Minerals.	In
PART POSSESSIONS.		NATIVE MINERALS.		
	S. Amer.	W. Indies: sulphur, petroleum, asphalt, phosphatic nod British Guiana: kaolin, agates, rock crystal, edi fusorial clay.		
	Asia.	Burmah and Pegu: petroleum, naphtha, rubies. Straits Settlements: tin, gold, silver, other metals ab North Borneo: diamonds, coal, platinum, gold. Hong-Kong: an emporium for China.		

CONCLUSION.

1. The interdependence of nations for material and other supplies.—2. The world naturally divided into trade-areas, furnishing dissimilar produce, and commodities.—3. These areas are determined by natural conditions, and are not necessarily national divisions. Transit.—4. The element of progress.—5. Commerce in relation to industries.—6. Divisions of industrial life in England.—7. Self-supporting occupations.—8. Injury to our commerce if we were restricted to the utilisation of our native earth-gifts.—9. What we draw from the mineral kingdom in our islands.—10. Occupations derivable from our own deposits.—11. Our earthy and woody-carbon products.—12. Our utilisation of the same.—13. Pursuits derived from our own supplies of alimentary vegetable produce.—14. Of vegetable textile earth-gifts.—15. Of other products of the vegetable kingdom, indigenous to our soil.—16. Of native animal produce.—17. Commerce in relation to industrial life.—18. Augmentation of our supplies by extraneous help, with industries derived therefrom.—19. The same, applied to woody hydro-carbons.—20. Importation of vegetable produce, of oils, hides, wools, silk, &c.—21. Of alimentary animal produce.—22. Necessity of world-wide commerce, proving the interdependence of nations.—23. Material good derived from the importation of products from other countries and climes.—24. Reciprocal service or exchange.—25. Statistics of trade from 1870-1885, and 1888.—26. Movements of trade and population during these years: *a.* Our colonial trade movements; *b.* The value to us of our machinery and intellectual labourers.—27. *a, b, c.* The economic and observational sciences in relation to commerce.—28. The two great industrial divisions of the globe.—29. England's advantages and disadvantages. Our postage rates.

1. A study of the preceding lessons will force upon us one fact,—it is, the **natural and necessary "interdependence of nations."** Political or fiscal barriers are feeble where progressive civilisation renders a supply of comforts and luxuries habitual and indispensable. *Nature must have her own way;*

demand and supply, in the long-run, overrule all attempts to make any territory "self-contained," within its own frontiers. A growing craving for extra comforts or luxuries soon compels satisfaction. *The railway, the river-flow, or the ocean counteract all tendencies towards isolation.* Commerce opens wide the world, and ease of transit is the ruling factor for intercourse. Raw materials are unequally bestowed; co-operation collects and compares them, while competition selects and brings the best foremost; everywhere the free and intelligent man provides intellectual and manual industry. Let us illustrate these truths.

Norway has a very extensive sea-board, but is debarred, by physical conditions, from much internal activity; hence her population must either be very limited,—living on the produce of a poor soil,—or be in greater numbers,—content to remain at a low industrial and social level,—or *else have external resources.* We have seen that this last state of things prevails; therefore Norway plays a very useful part, becoming a factor in the general interdependence of nations; as also does Sweden, whose native products are too meagre for the support of her progressive population.

Germany, covering a large area of Europe, *cannot* keep alive a numerous and industrious people *without* extraneous help; her resources are confined to the area of northern grains and the products of the "beer and butter" regions, for she barely touches the "wine and oil" districts in her farthest borders.

Again, look at Holland, a low, flat country, without a metal of economic value, without a stream exclusively her own; or to Switzerland, without a seaport, without a river of navigable proportions, encompassed by huge mountains,—how would these nations fare if they attempted to be "self-sustaining"? The answer is clear. All these people would soon be reduced in numbers, would have to rest content with a scanty supply of necessities, to live without most comforts and luxuries, and to lose any hope of joining in international industry; for there is scarcely a manufacture, the materials

for which are derivable entirely from their own native resources.

2. But we have seen that none of these people are so situated; hence only one conclusion can be come to, namely, that all are dependent on foreign countries for, at least, part of their supplies; and their being so dependent on other parts of the world shows that among them, at home, is, and must ever be, a surplus of some sort to be disposed of in exchange. The law of the "interdependence of nations" forces upon Holland and Switzerland a search for raw materials, or for commodities,—not obtainable with ease within their own borders,—for home manufacture or for foreign trade, or for both.

We hope, thus, to have established the fact that the world is divided into areas of dissimilar produce, by means of which exchange may be, and must be, kept up among active nationalities.

3. The industry and intelligence of man are the primary factors in effecting this exchange. All strive, by internal as well as external competition, to supply real wants; afterwards to form fresh wants; to economise labour and yet increase the yield; to distribute and receive with ease,—for it is evident that much depends upon being able to *get* what is wanted, and also *send away* the equivalent; hence "**facility of transit and transport**" becomes an important element of commercial activity,—*it is of more consequence than mere position.*

But how are transit facilities obtained? Are they not mostly favoured, if not dictated, by nature? Waterways and railways are constructed, and rivers run in strict accordance with physical features. Hence **nature, in her physical aspects, is the primary consideration**; and **nations will, of necessity, be divided and subdivided into areas, controlled by natural features.** But these features remain permanent, without regarding political lines of demarcation. So it comes to pass that **continents are divided into physical or "natural areas," irrespective of nationalities**; and the whole world is

transformed into a garden and its adjuncts ; one part yielding the rough or raw material, and another favouring the transplanting, pruning, forcing, or replanting ; one is allotted to beauty, another to storage. As there is perfect accord in each division of a garden, each being dependent on and unable to subsist without the other ; so with the whole world, the whole is interdependent, is subsidiary to intelligent industry ; and wherever a nation or an individual tries to separate any part for itself or himself to the exclusion of others, nature will, in the long-run, assert her sovereignty.

4. One more thought : **the world is in the main progressive.** Remember the simile of the garden,—first the weeds, the coarser vegetables, then the fruits, the flowers, delights to vision, scent, and taste ! There are in it but the two factors, nature and man ; yet the industry and intelligence of the latter reap a grand reward from the response of the former. Perfection of sight, scent, and taste has not been developed in a single generation, but only after centuries. The delicacies of Roman epicures would hardly be luxuries now ; the dainties of the untutored denizens of Africa would be scouted by civilised Englishmen. Hence the conclusion, **that progress in nature's yield is linked with man's intelligence.** We see this more clearly by examining the imports and exports of various nationalities. We find that inhabitants of western European countries have entered upon a heritage, handed down through many a lifetime, and that they start,—as it were, with a legacy stored by their forefathers,—certainly from a higher platform of excellence than do the native tribes of uncivilised lands. Extend this thought of progress throughout the globe, and we see the exalted work that mental diffusion and commercial distribution undertake and largely accomplish.

5. **England is considered the centre of commercial movements throughout the world ;** but how dependent we are for much of our food-supplies, and for the raw material of our manufacturing industries, we have seen already. In the

"Studies of the United Kingdom" (see the "Golden Gates of Trade") we have shown our natural possessions, or "earth-gifts;" let us now see what industries are paramount in England; how far our own supplies suffice for these; what industries are carried on by means of imports; whether these imports are indispensable; and, finally, how they are paid for by the manufactured articles again exchanged as exports. For, although **commerce is mainly concerned with distribution**, yet, in its entirety, *it must include, on the one hand, industries*,—by which we mean the use made of raw materials, by intelligent labour bestowed upon them, as manufactures,—and, *on the other hand, the means by which these "earth-gifts" are discovered and raised in value*. It is evident that if there were no industries there would be no need of extensive transport, neither could there be any if intelligent labour were not forthcoming.

6. **The chief industries of England** are those connected with the weaving and preparing of cotton, wool, silk, flax, and hemp; of iron and steel work in all branches,—engines, boilers, machinery, and implements,—agricultural and otherwise; of glass, pottery, crockery, and bricks; chemicals, and attendant industries; of cabinet and other woodwork; of leather; of alimentary products; of paper; and of shipbuilding. To these we must add the labour industries connected with the soil, with mining, and with "the harvest of the sea."

7. Now, **how far are our local supplies useful in these industries?** A glance shows us that they are very limited. *Cotton* we cannot grow; the clip of native *wool* yields only a very meagre amount; *silk* is not indigenous to England; *flax* is not largely grown; and *hemp* is but little available. Of *iron* we have an abundance; and possessing, likewise, large stores of *coal* and *limestone*, **we could prosecute our iron and steel works without outside help**. For our *engines, boilers, and implements* we can furnish material and intellect; for *glass, pottery, crockery, and bricks* we have ample raw material; of *chemicals* and attendant industries we can only supply a

part. Our deficiency of *timber* acts prejudicially against our wheelwrights and heavy woodwork generally; while, for *ornamental woods*, we depend entirely on other areas. Of *skins* and *hides* our insular yield is insignificant. We have shown already that the whole *alimentary produce* of our land would suffice, but a very short time, to keep our population alive; therefore we are beholden to other climes for *assistance* in essentials, and, *entirely* so, for luxuries of fruits, &c., not belonging to the zone of hardy grains. Our materials for *paper-making* are insufficient. For *our ships*, if of iron, we can supply the requirements; but, if of wood, we look almost entirely to external aid. *Our muscular and mental labourers*, on the soil, below the soil, and on the sea, are amply sufficient.

8. We have now roughly glanced at all our important industries. If we did not "exchange," where would our town labourers find employment? Are not the industrial occupations of the United Kingdom an index to the "interdependence of nations"? Is it not true that, were we to attempt to be "self-sustaining," many of our chief industries could not be carried on at all, others would languish through the failure of part supplies, while those that our own resources can sustain, would be overcrowded, with the inevitable result of non-remunerative labour, and the impoverishment, if not the diminution, of the population?

9. We have indicated, roughly, what industries are carried on *from our own supplies*; but there are very many *divisions* among those we have named. For instance, the "earth-gifts" of England give rise to the following occupations *inter alia*;—note how many of them have arisen solely from the fact of our being one of the factors in the interdependence of nations; e.g., dock-building and lighthouses.

The **Primary granites** of Cornwall yield the material used for docks, breakwaters, and national works, as in London, and at Portland and Chatham; for bridges and embankments, as at Rochester; and lighthouses, as at Great Basse. Those of Cornwall, Devon, Swanage, Aberdeen, Peterhead, and Isle

of Mull for kerbstones, paving, pillars, and buildings, as in London,—the Duke of York's column, British Museum,—and Aberdeen houses.

The syenite of the Channel Isles and the greenstone porphyry of Carnarvon are used for road-metal and paving; the porphyritic granites of Ireland for ornamental work, such as the pedestal of the Albert Memorial.

The rock-crystals of the north give us the ornamental bloodstones, cairngorm stones, and common opal; and those of Western England yield the so-called Bristol and Cornish diamond. The chert of carboniferous limestone and flint of chalk are used as road-metal, although in olden days employed in the manufacture of Worcester porcelain; and for arrow, spear, and lance heads in prehistoric times. The fine white sands of the south of England are utilised for glass manufacture, while coarse sand is everywhere used for mortar.

Soft sandstones are also used for mortar. The compact sandstones (*freestones*) of the oldest formations (from Scotland, Durham, Yorkshire, &c.) are excellent and durable; while some more recent sandstones, as the Wealden or Hastings, are sometimes hard enough for building purposes.

Clay slates in Wales, and also in Westmoreland, are used for tanks and tablets; while the Delabole slates of the south-west are employed for roofing, flagstones, and imperishable tombstones.

Hones of Charnwood forest stone are used by joiners; while, among others, we get the Devonshire oil-stones, Welsh oil-stones, and cutler's greenstones; the Scotch stone for copper-plates, and the Flintshire stone, used exclusively in the Staffordshire pottery district for grinding flints. Millstones of the north-east, and the grindstones of the north,—the Yorkshire stone, for polishing marble and copper-plates; the Sheffield bluestone, for giving the last polish; and the Wickersley Yorkshire stone, for cutlers,—speak for themselves.

The argillaceous limestones of the White Lias produce

hydraulic cement when burnt, while the Roman and Portland cements have a well-known name.

Among clays, we get the *kaolin* or fine China-clay for porcelain, also used in paper manufacture and bleaching; and *pipeclay* from the south; *fireclay* of Stourbridge, for firebricks, crucibles, and tiles; of Glamorgan, for firebricks and lining smelting-furnaces; and the *clays of London* and various parts, for building-bricks.

The uses of fuller's earth and ochres are well known.

Steatite, or soapstone of Cornwall, is called "French chalk," when prepared and used by glovers and bootmakers; it is also utilised for gas-burners.

Crystalline carbonate of lime, or marble, in the Midlands is made into tazzas, tables, &c.; that of Ireland is famous, —Ennis for black, Connemara for white, and King's County for sienna marble. Among compact limestones are the *Lias*, mainly used for hydraulic cement, as mentioned above; the *Lower Oolite* or *Bath stone* is soft, but makes fair building and excellent ornamental stone; the *Upper Oolite limestone* (*Portland* and *Purbeck*) is unsurpassed for building; while the *Cretaceous* or *chalk* deposits are excellent materials for making quicklime.

Carbonate of lime and magnesia, or the dolomite and magnesian limestones of the Midlands, yield, when well seasoned, an excellent building-stone,—in the Tyne manufacturing towns this stone is used to make carbonate of magnesia, and sulphate of magnesia, or Epsom salts. Of sulphate of lime,—alabaster and selenite when crystalline, gypsum when earthy,—much is used in the potteries of Staffordshire, for making "plaster-of-Paris" moulds.

Of metals we have seen that England has a supply which would enable her to carry on most, if not all, of her metallic industries.

10. These native "earth-gifts" give the labourers of England full occupation in the following industries.—Pottery and porcelain,—glazed or plain,—chiefly in Staffordshire (Stoke-on-

Trent), Coalport, Worcester, Leeds, Derby a little, Lambeth, Newcastle-under-Lyne, &c.

Terra-cotta, ornamental stones, tiles, friezes, tessellated pavements in Staffordshire, Lambeth, and Devonshire.

Bricks very generally. **Basalt mouldings** for architectural ornaments, paving-tiles, &c., in Birmingham. **Chemicals** on the Tyne. **Glass** in Newcastle-on-Tyne, Birmingham, Staffordshire, Bristol, London, Cork, &c.

Alums, Whitby, Newcastle, Glasgow; **glauber salts**, Lymington; **Epsom salts**, Epsom and Lymington, natural,—on the Tyne, manufactured; **table-salt** from the Keuper marls of Cheshire, &c., and brine-springs of Droitwich, &c.; **gun-powder** in Essex and Kent; **kelp**, or seaweed-soda, on the coasts, but chiefly North Scotland,—roadmaking, &c. **Hardware**, cutlery, tools, implements, engines, machinery, pins, needles, copper, lead, tin, brass, and metal works.

11. Among our own supplies of earthy or woody hydrocarbons, we have *plumbago* in Cumberland; *peat*, *lignite*, *jet*, at Whitby; **Kimmeridge coal**, a bituminous shale yielding alum by calcination, in Devon; and coal. **Mineral oils**, &c., are too sparingly found to be useful; *hatchettine*, or mineral tallow, is found in the clay ironstone of the South Wales coalfield; and *elaterite*, or mineral caoutchouc, in the carboniferous limestone of Derbyshire.

Our supply of timber is somewhat scanty, and consists, in the main, of oak, elm, beech, ash, lime, poplar, chestnut, larch, and willow.

12. The industries directly derivable from these are:—Lead-pencils, jet and amber goods; extraction from coal of lighting-gas, benzine, naphthaline, coke, coal-tar, with its aniline dyes and other products; the extraction of tar, pitch, and turpentine, from coniferous trees; sawmills; carpenters', joiners', cabinetmakers', upholsterers', wheelwrights', and matchmakers' industries.

13. From the alimentary vegetable kingdom spring the industries of *flourmaking*, at Reading, Newark, Hertford, &c.;

biscuits, London, Reading; *jams*, London, &c.; *pickled vegetables* and *fruits*; and *cakes*. *Malting*, *brewing*, at Burton-on-Trent; *cider* and *perry-making*; and *whisky-distilling*.

14. Our native vegetable textile weaving and plaiting materials are very small; only rushes, osiers, straws, and some flax. These account for the *straw-plaiting industries* of Luton, &c., the *linen manufactures* of Ulster, and the *ropes and cordage* of London and Scotland.

15. Of native vegetable oils we have none; of gums, &c., only pitch and tragacanth; of vegetable wax, none; of dyes, only woad and gall-nut; of tanning materials, only gall-nut and oak-bark.

16. Of animal products, we have but a small supply of tallow, bees' wax, hides, skins, bones, horns, horse-hair, down, and sheep's wool,—not enough to support our woollen-spinning, candlemaking, soap, and paper industries; while the oil-mills of Hull, the bleaching of Ulster, Scotland, and other places; dyeing of Stroud and Perth; broom-making, leather-working, tanning, fertilisers,—such as bone-dust treated with sulphuric acid at Arbroath,—hats, gloves, and hosiery, would practically die out if left solely to our native products for supply. Of alimentary animal produce, we have a fair number of oxen, sheep, pigs, poultry, and a large supply of fish; these assist in maintaining the dairy-produce farms, the ham and bacon curing, the potting, curing, and salting of fish; but, excepting the last, our supplies would fail to satisfy our population for more than a few weeks.

17. Judging from these remarks, what would be the position of England if cut off from international commerce? If she were prevented from acquiring earth-gifts dissimilar to her own; if she were compulsorily self-sustaining within her sea-girt borders, would not the fabric of our industrial, commercial, and social life be damaged, perhaps destroyed? But the advantages of reciprocal exchange are understood; the result is seen on our wharves and in our warehouses, in

the vessels that crowd our coasts, and in the harbours that receive the products of the whole globe.

18. We thus augment our native supplies, and amalgamate therewith resources from all parts of the world. For example, we *assist* our *mineral* industries by *importing* borax, boracite, barytes, copal gum, cubic nitre, carbonate of soda, diamonds, gypsum, guano, jade, kaolin, lithographic stones, mica plates, meerschaum, marbles, nitrate of soda, natron, pouzzolana, phosphatic nodules, precious stones, pumice, sulphur, sal ammoniac, saltpetre, talc, tufa, Tripoli powder, copper, tin, lead, zinc,—although these last four are fairly abundant,—manganese, mercury, gold, silver, bismuth, cobalt, arsenic, antimony, platinum, and iron ore,—the best comes from Sweden and North Spain, and is a magnetic ore, very scarce in the British Isles.

These imported earth-gifts assist our native industries ; but they do more, they encourage fresh “openings for trade.” We see them in the gold and silver work of the goldsmith and the silversmith, in the lapidary’s, setter’s, and watch-maker’s craft, in sewing-machines, pianos, &c.

19. We make up for our want or insufficiency of woody carbon-compounds by importing graphite, amber, jet, dye-woods, structural and cabinet woods,—such as Brazil-wood, black walnut, boxwood, bamboo, bird’s-eye maple, birch, cherry, cedar, cane, eucalyptus, eaglewood, ebony, fir, kauri, lignum vitæ, lancewood, mahogany, pine, peachwood, teak, sapanwood, pit-props, sleepers, sandalwood, fustic, campeachy-wood, &c., besides naphtha, petroleum, and asphalt.

These imported products tell us of costly cabinet-work, shipbuilding, instrument-cases, dyeworks ; of paving, lighting, railway-lines, and mining-works ; of wooden vessels, and costly steamship cabin-fittings.

20. Of alimentary vegetable produce, we import grain of all sorts, fruits of every kind, spices and seasonings, drink materials,—as coffee, tea, cocoa, Lager beer, brandy, “Hollands,” &c. Of medicinal products, tinctorial, tanning,

narcotic, and essence "raw materials," we are indebted for nearly, if not quite all, to other countries and other climes. We import, too, very nearly all our vegetable textile material,—bast, cotton, cane, carloduica palmata, coir fibre, flax, coco-nut fibre, hemp, jute, pula or vegetable silk, rushes, straws, hair of goat, alpaca, camel, &c.

The enumeration of these "foreign" earth-gifts brings to our minds *the vast industries* of our Midlands, the manufactures of Dundee and circle, of East London, the specialties of Manchester, Leeds, Dunfermline, Arbroath, Belfast, Saltcoats, &c.

Our oils, both vegetable and mineral, our hides, skins, ivory, antlers, horns, bones, bristles, feathers, silk, and wool, are nearly all imported, and *sustain extensive industries* in Rochdale, Trowbridge, Welshpool, Huddersfield, Bradford, Witney, Stroud, Kidderminster, Paisley, Leeds, Coventry, Congleton, Spitalfields, Macclesfield, Honiton, &c.

21. **Alimentary animal produce** is largely introduced, but gives rise to no national industries, being chiefly used for internal consumption.

22. A glance at these two lists,—native products and imported "earth-gifts,"—proves the necessity for world-wide commerce,—*of interchange,—of exchange,—for our well-being, nay, for our existence*; it shows the gain of reciprocal trade, and exhibits conclusively the "*interdependence of nations*;" for the very mention of these commodities carries our thoughts to every corner of the globe. Just imagine our being deprived of the cotton fibre,—one of our greatest industries would die out!—and if there were no territorial exchange, there would be no need of England's merchant-service!

23. The transport of these materials to our shores, however, does more good than cause an increase of national gain; the variety of *earth-gifts stimulates research; it fosters industry, and evokes invention*. Look at the many directions that the cotton import takes or leads to. The cotton itself is only a vegetable fibre, but in its manufacture and dyeing, it requires the aid of materials from every part of the world.

We have now laid before the student a bird's-eye view of the "course of interchange," and have shown how all international movements are strictly in accordance with nature and natural laws. *Mutual dependence is as necessary to commercial life as to social life.* Further useful lessons may be derived from the study of the localisation of England's industries,—the mineral deposits are given *in extenso* in the "Manuals of Commerce."

24. We have now to consider how these imported raw materials are paid for by us; that is, what do we give in exchange for them? We "send out" from this country no native "earth-gift," except coal, and some iron,—wrought, not "raw,"—and salt; therefore it is clear that our exchange must consist of "advanced" products;—a review of our industries, in relation to native and foreign raw material, will show this. We have next to examine whether this interchange is an increasing one; to do this we must refer to commercial statistics. We would again repeat,—*the object of criticising the trade movements of any country is to obtain a clear idea of the "tendency" of trade*; it is not to compare figure by figure; hence in our statistical review *we deal only with figures in the gross, and these only in round numbers.* The mode of treatment is very similar to that used by the late Dr. Mann, in a paper read before the Society of Arts, February 16, 1886, prior to the opening of the Colonial and Indian Exhibition.

25. From 1870–1873, the total imports into the United Kingdom averaged 340 millions sterling per annum, while the total exports averaged 288½ millions,—of this, 233½ millions represented the value of British produce exported. During these years, the proportion of the imports, per head of the population, rose nearly 20 per cent., and of exports about 22 per cent.

In 1873, the imports from our British possessions were valued at 8½ millions, while our exports thereto reached the sum of 66½ millions sterling.

More than half our imports came from the United States, France, India, Russia, Germany, and Australia; and more than

half our exports went, in the following order, to the United States, Germany, India, France, the Netherlands, and Australia. The imports from the United States exceed those from India,—our greatest colonial transaction,—by something over 40 millions sterling.

The population of the United Kingdom, in 1871, is given as $31\frac{1}{2}$ millions, of which number England alone held $21\frac{1}{2}$ millions; by the year 1881, the number *had risen* to $35\frac{1}{4}$ millions, of which England had $24\frac{3}{4}$ millions. We are, at the time of writing, on the eve of another census, and from information, it is fair to assume that a further considerable rise will be shown.

From 1881–1885, the total imports averaged 400 millions sterling per annum, within three or four hundred thousand pounds; the exports averaged $232\frac{1}{4}$ millions of *British produce*, and 295 millions in all.

The proportion per head of the population declined on both imports and exports; starting some $1\frac{1}{2}$ per cent. lower on imports in 1881 than it had left off in 1873, it declined a further 10 per cent.; while the exports, starting about 15 per cent. lower in 1881 than they were in 1873, went back a further 12 per cent.

The imports from British possessions, in 1885, were valued at $84\frac{1}{2}$ and the exports at 78 millions sterling.

As a single year, 1888, the total imports were just below 390 millions, while the exports of British produce barely reached 235 millions sterling.

26. Looking at the "*course of trade*" from 1870–1885, we notice, first, that in the period 1871–1881, the population of the United Kingdom rose fully 12 per cent.,—England's increase being nearly 14 per cent.; secondly, we trace that the total imports rose about 18 per cent., and the exports about $2\frac{1}{2}$ per cent.; but *notice especially that the export of British produce declined slightly*. This is very noteworthy, and we are forced to conclude that the rise in total exports is solely by reason of our transit-trade, which is

remunerative to us as carriers, but is no index to commercial prosperity.

Observe, again, that the total trade movements, in relation to the increased number of the population, show a marked decline.

a. The most healthy feature in these years is the increase in the trade with our colonies and possessions ; the augmentation in imports being fully 4 per cent., and on exports 18 per cent.

We have shown elsewhere that "if we lose our customers, we lose, by so much, the power of interchange ; in other words, to import ; therefore diminished exports mean diminished imports, and consequently declining trade." Looking at the figures before us, we cannot shut our eyes to the fact that from 1871-1885 the *tendency has been downwards*,—nay, even up to 1888, the *average* was lower than the 1881-85 period,—a real retrogression, if we consider the total trade of the world and the increase of population. But, it may be asked, how can this be, with an importation increased by 18 per cent. ? The solution is not far to seek. *A good deal of our imported merchandise is received by us as an emporium*,—to be sent out of the country again ; *this swells our import list, but does no good to our country, save and except the gain to us for storage.* We have shown elsewhere why the difference between export and import values may be great,—and *if we forget our position as an emporium, and the fact of the indebtedness of other countries to us*, we may be led away, by the apparent rise in imports, to believe that trade is progressing in a satisfactory manner ; but—the test of a country's well-being and progress is seen best by comparing its purchasing power at one time and at another. Inasmuch, then, as imports are paid for by exports, it is clear, from the preceding figures, that, as far as we are concerned, *we have parted with less and less of our "harvests ;"* hence we could not receive so much from other countries in exchange, and we are thrown back upon the conclusion that the difference in the value of imports is made up of transit

goods,—some 60 millions,—and also of “interest on loans,” with dividends on various other investments.

Further, with diminishing exports,—hence diminishing imports,—*our population has much increased*; consequently this “capital” means less per head,—a less amount to be spread over a greater number, or, if we may so term it, a lowered commercial vitality. And as, even with less exports and imports, *our colonial trade has increased*, it is clear that our trade with the world at large has suffered curtailment; in other words, we have lost customers. However, this colonial increase may show the value of our colonial commerce, and the proof of the maxim that “trade follows the flag;” the loss of customers is a matter of national importance, and much to be regretted.

b. To show the immense value of our machinery and our labour; in a given year, raw cotton came in at a value of $54\frac{3}{4}$ millions sterling, and was sent out as “an advanced product,” valued at $77\frac{1}{3}$ millions; wool came in at $19\frac{1}{2}$, and went out at 31 millions sterling manufactured. The difference between these figures represents the labour value, paid us by other countries to supply our workers, from the highest to the lowest, with the necessities, conveniences, comforts, and luxuries of life, to replace “stock in trade,” and to augment capital.

27. Let us suggest another thought. We have said in an Introduction to one of the “Manuals of Commerce:”—“We may feel safe in supposing that every one of the skilled men concerned in discoveries was an educated man, *trained beforehand in some, if not several, of the following sciences of observation:—geology, mineralogy, geography, economic botany, and zoology*; these form part of the ‘science of commerce.’” Let us, in closing, give a rough key, as it were, to *earth-gifts*. Very useful lessons may be learned by the student drawing comparisons between different countries, using “reason,” and applying the principles laid down. We have endeavoured to show the “course of trade” throughout the world; to exhibit the principle of reciprocal exchange; we have introduced the

future leaders of England's commerce through the "Golden Gates" to the "natural areas" of the world ; and in these "Map Studies" we have indicated the knowledge required to search for and to make use of these earth-gifts which nature provides.

a. The various strata of the earth's surface, scientific men tell us, are, in their order, roughly, as follows :—**Fundamental rocks**,—(a) *igneous*, (b) *metamorphic*, or lowest Primary rocks, giving granites, mica slates, felspar, syenite, porphyry, graphite or plumbago, manganese, copper, and tin. **Upper Primary rocks**, embracing the *Silurian*, with its stores of gold, silver, lead, copper, slates, stones, and phosphates ; the *Devonian*, with roadmaking material and building-stones ; the *Carboniferous*, with limestone, slates, coal, fireclay, and ironstone ; and the *Permian*, yielding magnesian limestone, lithographic stones, &c.

Secondary rocks, with subdivisions,—the *Trias*, giving salt-beds, sandstones, flagstones, gypsum, fuller's earth ; the *Jurassic*, yielding clays, jet, lignite, building-stones, hematite iron ore, iron pyrites, ironstone, &c. ; and the *Cretaceous*, affording chalks, flints, marls, and coprolites.

Tertiary and Quaternary rocks, from eocene to recent, give us auriferous deposits derived from gold-bearing rocks, precious stones, lignite, bitumen, clays, sulphur, amber, lavas, gravel, and sand of recent alluvial deposits.

Given, then, a knowledge of the geological stratum of any point of the earth's surface, the student will be able to judge of the economic minerals there to be obtained,—the distribution of mineral and metallic earth-gifts.

b. In the vegetable kingdom, *wheat* requires a dry soil, and the full rays of the sun, unstopped by particles of moisture ; *oats* are grown best in cold climates, the structure of the plant allowing the grain to swell under circumstances that would be fatal to wheat ; *barley* occupies a position between these two grains ; while *maize* is the staple crop of warm climes, where heavy rains occur, followed by a powerful sun.

c. In the animal kingdom, the "useful beasts" follow in the track of man, and are scattered over a wide area. *Man*, too,

varies in territorial divisions, influenced much by climate and temperature; speaking generally, *the farther south we go, the more apathetic and passive become the people, while the inhabitants of temperate climes are generally active.*¹

With this key of the world's storehouse, let the student knock at nature's gate for admission, and "read his map" with a full knowledge of nature's principles.

28. Remember, too, that **the earth provides whatever man requires**; the inhabitants of hot climates require cotton clothing, and those of colder regions, woollens, and the raw material for these is obtainable just where it is wanted; but, mark, —*man is not everywhere ready to make use of nature's gifts.* The inhabitant of the warm zone *plucks*, perchance, his cotton from the shrub, but *he passes it on* to the western nations of the temperate zone *to be made up.* The active nations of the northern hemisphere "make up" the earth-gifts of, and for, the passive nations of other parts. **The world is thus further divided into two great divisions,—the machine-using countries,** and those that draw their sole sustenance from the soil, or *countries that do not use machinery*; and as we have shown that nature yields abundantly in each climatic zone, for the inhabitants of that zone, it is clear that *it is among the machine-using nations that the competition for sustenance will be the keenest.*

29. We, in England, have **the benefit of a well-defined frontier**; we have our railways, telegraphs, and telephones, our machinery of all kinds, our ships, and our intelligent workers. **On the other hand,** we have a system of currency, weights and measures, *not in unison* with other lands; we are indebted to other nations for many improvements in every direction; and we have certain anomalies in international intercourse, which it would be well to see adjusted. On this latter subject we will give a single example,—our **ocean-postage.** A recent writer says:—"Our Post-Office rates have destroyed, for practical

¹ For full details of the economic products of the three kingdoms of nature, see "Natural History of Commerce," vol. i. of the Manuals.

*purposes, the great natural advantages which London possesses, as the centre and capital of the English-speaking world, and transferred the advantages of cheap communication to our competitors and rivals. For instance, to have posted 10,000 copies of a particular publication to India, from London, would have cost in postage £500, but, if posted in Russia, only £200. A Russian can write to India for 2½d., but it costs an Englishman 5d. If 10,000 circulars were posted to Persia,—a market where England and Russia eagerly contest every point,—it would cost £62, 10s. to post them in London; but if I send them in bulk to St. Petersburg, and post them in Russia, they will all be delivered for £20, 16s. 8d. The same with Australia; from England the cost is 6d. for half-an-ounce, but from Germany only 2½d.”*¹

Throughout this treatise the best available authorities have been used; for the statistical returns many works have been consulted, but the “Statesman’s Year-Book” has been the final reference, because well and widely known.

We have not given the “raw materials” from the animal kingdom, country by country, in the foregoing Studies, because, *the domesticated animals*, from which most of our supplies are drawn, *follow man into nearly every corner of the globe*, and thus we should be drawn into repetitions. Such *animal products* as silk, wax, &c., we insert among *agricultural products*, in brackets, because they are restricted to the botanical zone which may be under consideration. **Agricultural produce**, therefore, throughout this work, means **vegetable growth, timber, &c., pastures**,—carrying therewith dairy-produce,—cactus, or, as we say, cochineal (really animal), mulberry,—or silk, &c.; and, in general, anything directly derivable from the surface of the earth.

We have suggested elsewhere (Introduction, p. xv.), that the student should compare the latest statistics of various nationalities, and thence infer the tendency of our trade. We are

¹ See the *Review of Reviews*, May 1890.

unable to give a *third* quinquennial average (1886-90), but we append *the most recent proportions*; that is, percentages of "turnovers," for the latest year available. It is for the student to compare these of a single year, with the quinquennial averages, and form his own conclusions.¹

The following percentages for each country represent the proportions between the *imports of produce exclusively British*, and the *imports from all sources*; also, between the *total exports*, from the given country, and the *exports which are sent into the United Kingdom*. In other words, the object aimed at in paragraphs 30-35 (Statistical Abstracts) is to show briefly and clearly the amount of business done by ourselves in 1888, with each of the countries named.

Taking the first on the list; the meaning is, that we supplied to the Norwegians 16 per cent. of all the goods which the Norwegians imported from every known source; and that we received 45 per cent. of all the produce which the Norwegians exported.

Whatever additional transactions the Norwegians had with different nations, they had transactions with us to at least the extent named.

The calculations are made at the rates named, without regard to "exchange value;" any variation in "exchange" must be left to the student to work out. The figures are from our own Board of Trade returns.

Let us give one more example, from a preceding chapter. We have shown in the Introduction how we treat *averages*;—PERCENTAGES are calculated upon actual amounts, hundreds being omitted. Thus: "Total imports averaged £7,110,000,—British contribution was about a million and a half,—percentage about 20 per cent." (20 per cent. on £7,110,000 = £1,422,000; the real figures were "averaged £1,469,297." See Norway, page 5).

¹ *Density of population* has, throughout, been calculated on returns given in the year then under consideration.

30. EUROPE.

Norway.—We supplied, in 1888, 16 per cent. of their imports, and received 45 per cent. of their exports. Calculation, 18 kr. to £.

Sweden.—15 per cent. of imports; 60 per cent. of exports. 18 kr. to £.

Denmark.—Just over 13 per cent. imports; 65 per cent. exports. 18 kr. to £.

Germany.—About 9 per cent. imports; 16 per cent. exports. 20 marks to £.

Belgium.—11 per cent. imports; nearly 31 per cent. exports. 25 francs to £.

Holland.—8.2 per cent. imports; 28 per cent. exports. 12 glds. to £.

France.—Just over 9 per cent. imports; 21 per cent. exports. 25 francs to £.

Spain.—Just over 12 per cent. imports; just over 38 per cent. exports. 25 pesetas to £.

Portugal.—Nearly 21 per cent. imports; 41 per cent. exports. $4\frac{1}{2}$ mil. to £.

Italy.—Just over 12 per cent. imports; about 9.5 per cent. exports. 25 lira to £.

Switzerland.—Just over 5.3 per cent. imports; 15.5 per cent. exports. 25 francs to £.

Austro-Hungary.—About 2.2 per cent. imports; nearly 3.5 per cent. exports. 12 flor. to £.

Turkey.—30 per cent. imports; about 36.6 per cent. exports. 105 piastres = 1 lira = 18s.

Roumania.—8 per cent. imports; about 33 per cent. exports. 25 lei to £.

Servia.—10.6 per cent. imports; 2.16 per cent. exports. 25 dinar. to £.

Greece.—Nearly 2.4 per cent. imports; 5 per cent. exports. 25 drachma to £.

Russia.—11.9 per cent. imports; about 32 per cent. exports. 10 roubles to £.

31. ASIA.

- India.**—Nearly 47 per cent. imports; 31.7 per cent. exports.
At 10 rupees to £.
- Ceylon.**—12 per cent. imports; 64 per cent. exports. 10 rupees to £.
- Farther India.**—16 per cent. imports; 23 per cent. exports; from tabulated dollars; but 10 per cent. imports, 25 per cent. exports, from Board of Trade returns. Dollar at 38. 2d.
- China.**—About 21 per cent. imports; 36 per cent. exports. $4\frac{1}{2}$ taels to £.
- Hong-Kong.**—70 per cent. imports; 65 per cent. exports. Sterling.
- Japan.**—31 per cent. imports; about 8 per cent. exports. 5 yen to £.

32. AFRICA.

- Morocco.**—About 34 per cent. imports; nearly 45 per cent. exports. Sterling given.
- Algeria.**—About 2.7 per cent. imports; 8 per cent. exports. 25 francs to £.
- Egypt.**—40 per cent. imports; 93.6 per cent. exports. £ stg. = £ E. - $2\frac{1}{2}$ per cent.
- Cape Colony.**—Nearly 56 per cent. imports; 50 per cent. exports. Sterling.
- Natal.**—70 per cent. imports; 70 per cent. exports. Sterling.

33. NORTH AMERICA.

- Canada.**—32 per cent. imports; very nearly 50 per cent. exports. 5 dollars to £.
- United States.**—20 per cent. imports; 58 per cent. exports. 5 dollars to £.
- Mexico.**—14 per cent. imports; 4.16 per cent. exports. 5 dollars to £.

34. SOUTH AMERICA.

- Colombia.**—Nearly 50 per cent. imports; about 1 per cent. exports. 5 pesos to £.
- Venezuela.**—About 1.6 per cent. imports; 7.4 per cent. exports. 25 bolivars to £.
- Brazil.**—Nearly 20.9 per cent. imports; just over 21 per cent. exports. 8.7 mil. to £.
- Uruguay.**—About 29.5 per cent. imports; 9 per cent. exports. 5 pesos to £.
- La Plata.**—30 per cent. imports; 13 per cent. exports. 5 dollars to £.
- Chili.**—18 per cent. imports; about 2 per cent. exports. 5 pesos to £.
- Bolivia.**—Nearly 1 per cent. imports; 8 per cent. exports. Sterling given.
- Peru.**—60 per cent. imports; nearly 100 per cent. exports. 5 soles to £.

35. AUSTRALIA.

- South Australia.**—About 35 per cent. imports; 43 per cent. exports. Sterling.
- West Australia.**—About 40 per cent. imports; 53 per cent. exports. Sterling.
- New South Wales.**—38.28 per cent. imports; 40 per cent. exports. Sterling.
- Queensland.**—41 per cent. imports; nearly 33 per cent. exports. Sterling.
- Victoria.**—37 per cent. imports; rather better than 42 per cent. exports. Sterling.
- Tasmania.**—3 per cent. imports; nearly 1.9 per cent. exports. Sterling.
- New Zealand.**—50 per cent. imports; 78 per cent. exports. Sterling.

We conclude our survey of the world's "Commercial Activity," by a tabulated list of "the produce of the British Isles,"—trusting that a perusal will assist the reader in studying this chapter in detail.

PRODUCE OF THE BRITISH ISLES.

NATIVE MINERALS.	<p><i>Coal, salt, tin, iron, Epsom salt, graphite (plumbago), ochres, fuller's earth, heavy spar (baryte), fluor spar, bathbricks, manganese, copper, lead, zinc, gypsum, serpentine, kaolin, fireclay, bones, freestone, granite, marbles, Portland stone, Bath stone, dolomite, alates, flagstones, millstones, peat, lignite, jet, paraffin shales, alum shales, rottenstone, pipeclay, &c.</i> Yield of metals over £32,000,000 per annum.</p> <p><i>Mineral Waters.</i>—England—Leamington, Harrogate (chalybeate, sulphureous, saline), Tunbridge Wells, Scarboro' (chalyb.), Cheltenham (sal. sulph.), Bath (sal. carbonated), Epsom, Buxton, Ashby de la Zouch (magnesian sal.), Bakewell (sal.). Scotland—Moffat (sulph.), Bridge of Allan, Cowgask (sal.). Ireland—Mallow (sal.), Newcastle, Ballynahinch, Lucan (sulph.).</p>	
VEGETABLE PRODUCE.	Food and Seasonings.	<p><i>Corn (wheat, oats, barley, rye). Vegetables (potato, cabbage, turnip, carrot, parsnip, pea, bean); fruits (apple, pear, plum, cherry, strawberry, gooseberry, currant, &c.); Irish moss.</i></p> <p><i>N.B.</i>—Corn and fruit insufficient for home consumption.</p> <p><i>No true spices, but seasonings, as: garlic, onion, leek, shallot, mint, celery, parsley, sage, marjoram, thyme, green mustard, garden and water cress, tomato, mushroom, samphire, caraway, coriander, and many pickled herbs and fruits.</i></p>
	Drink and Drug.	<p><i>Beer (ale, stout, porter), spirits (gin, whisky), cider wines (rhubarb, orange, currant, gooseberry, elder, &c.).</i></p> <p><i>Common drugs (from dandelion, chamomile, mustard seed, belladonna, foxglove, ergot of rye, &c.).</i></p>
	Industrial.	<p><i>Oils</i>—Rape-seed and perfumes of verbena, lavender, bergamot, heliotrope, &c. <i>Wood</i>—Oak, elm, beech, ash, Scotch fir, larch, chestnut. <i>Dyes</i>—Woad. <i>Tanning</i>—Oak bark. <i>Textile</i>—Flax (Ireland).</p>

ANIMAL PRODUCE.	Alimen- tary.	{ England—Beef, mutton, cheese, butter, ham, game (north). Scotland—Beef, mutton, game, <i>salmon</i> . Ireland—Pork, bacon, lard, butter.—Poultry and eggs everywhere, but insufficient in England. <i>Abundant fish</i> (whitebait, pilchard, sole, cod, mackerel, haddock, <i>herring</i> , turbot, plaice). <i>Shell-fish abundant</i> (oyster, cockle, scallop, periwinkle). <i>Crustacea</i> —Loabster, crab, shrimp, prawn.
	Indus- trial.	{ Ox-hides, sheepskins, horns, hoofs, bones (all greatly below the demand). <i>Coprolites</i> (for manure). Eider-down (Scotland and N. Ireland). <i>Whale and seal oils</i> (Scotland).
MANUFACTURED GOODS.	From Mine- rals.	{ <i>Metal plates</i> (iron, tin, copper, steel, zinc), <i>cast iron</i> , <i>iron ships</i> , <i>boilers</i> , <i>ovens</i> , <i>kitcheners</i> , <i>steam-engines</i> , <i>iron bridges</i> , <i>machinery</i> , <i>agricultural implements and machines</i> , <i>outlery</i> , <i>guns</i> , <i>tools</i> , <i>pins</i> , <i>needles</i> , <i>nails</i> , <i>screws</i> , <i>bolts</i> , <i>tin and copper smelting</i> , <i>slates</i> , <i>potteries</i> (earthenware and porcelain), instruments of all kinds (mathe-matical, optical, scientific, &c.), <i>tin</i> , <i>iron</i> , and <i>copper goods</i> , <i>swords</i> , <i>muskets</i> , <i>chemicals</i> , <i>powder</i> , <i>soap</i> , <i>marble slabs</i> , <i>granite blocks</i> , <i>alum</i> , <i>watches</i> , <i>hardware</i> , <i>glass</i> .
	From Plants.	{ <i>Calico prints</i> , <i>white calico</i> , <i>cotton and linen yarns</i> , <i>cotton-twist</i> , <i>linen and cotton fabrics</i> , <i>hosiery</i> , <i>paper</i> , <i>sailcloth</i> , <i>ribbons</i> , <i>poplins</i> (Ireland), <i>haberdashery</i> , <i>mixed cotton and linen stuffs</i> , <i>millinery</i> , <i>jute and hemp goods</i> (Scotland). <i>Shipbuilding</i> (England and Scotland). <i>Sugar-refining</i> (Scotland)— <i>biscuits</i> , <i>jams</i> , <i>marmalades</i> , <i>pickles</i> , <i>soap</i> , <i>matches</i> , <i>pomatums</i> , <i>toilet-powders</i> .—Beer, <i>spirits</i> , &c., see DRINKS AND DRUGS.
	From Ani- mals.	{ Ribbons, carpets, blankets, worsted, mixed woollen stuffs, silk lace, silks, boots, shoes, tanneries (England)—tweeds, shawls, plaids (Scotland)—hosiery, gloves.